

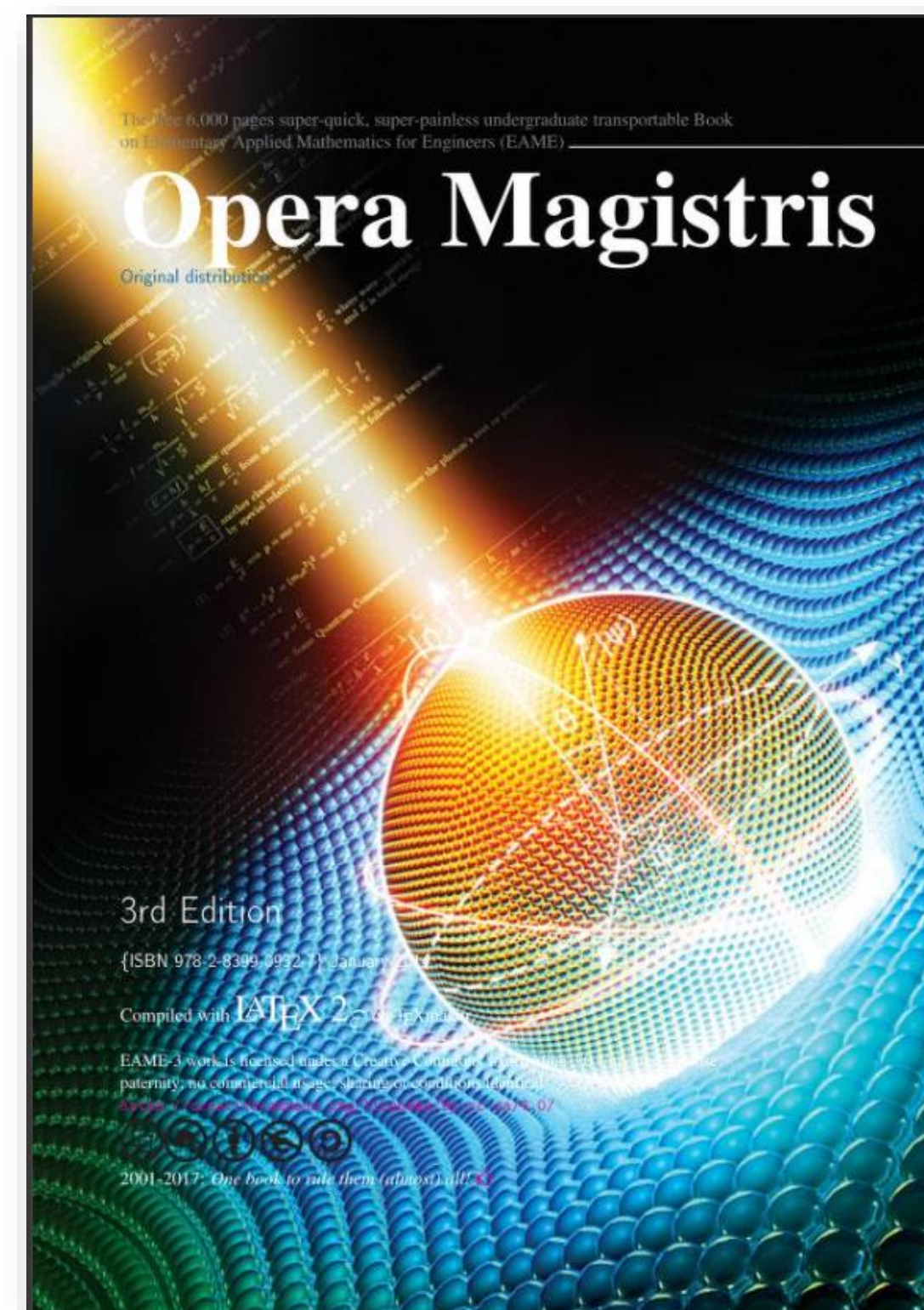
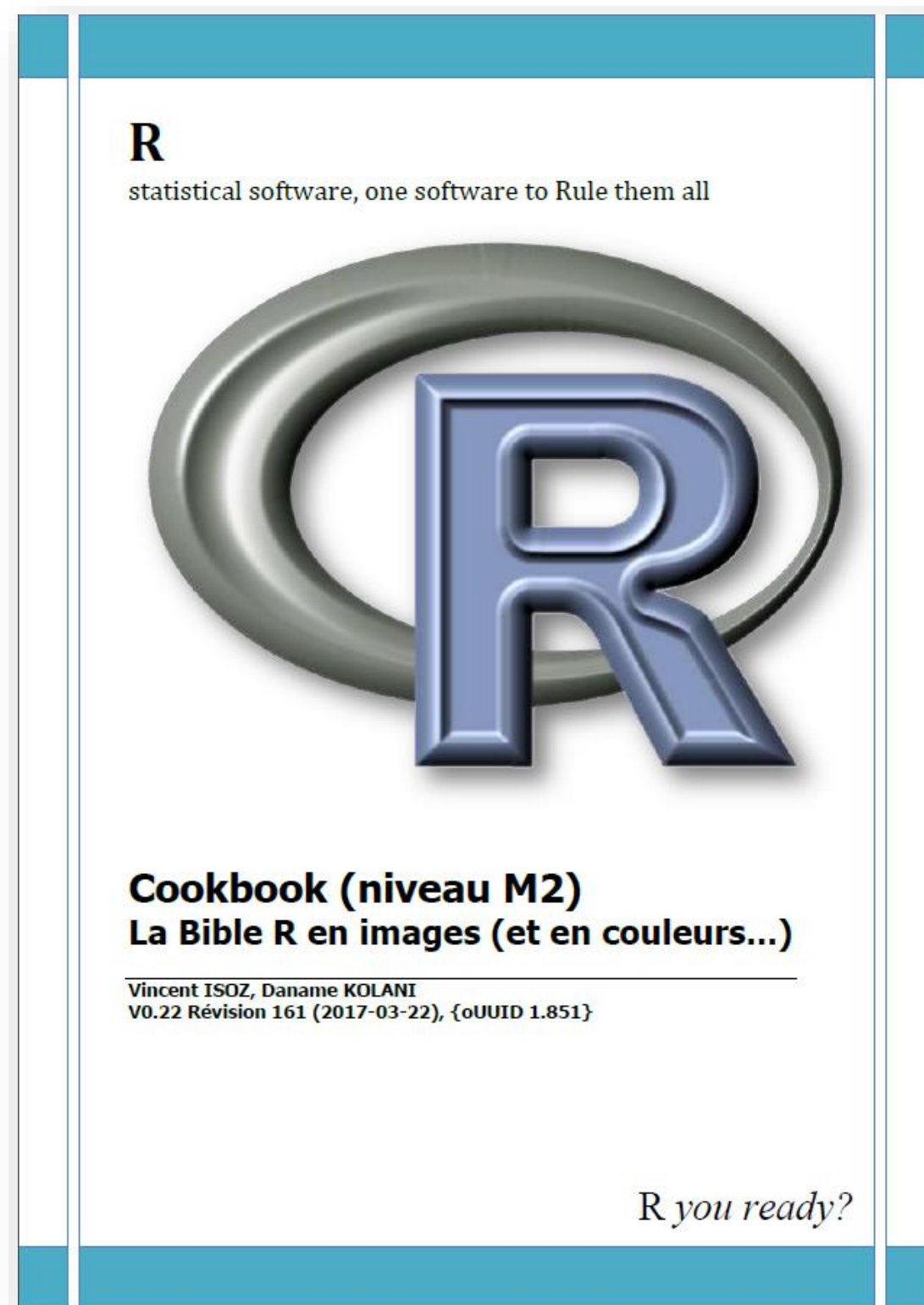
# Type of Charts

(with R 3.6.2 x64)

v10.0 2019-11-03

Informations

## Recommended books



## Recommended Links



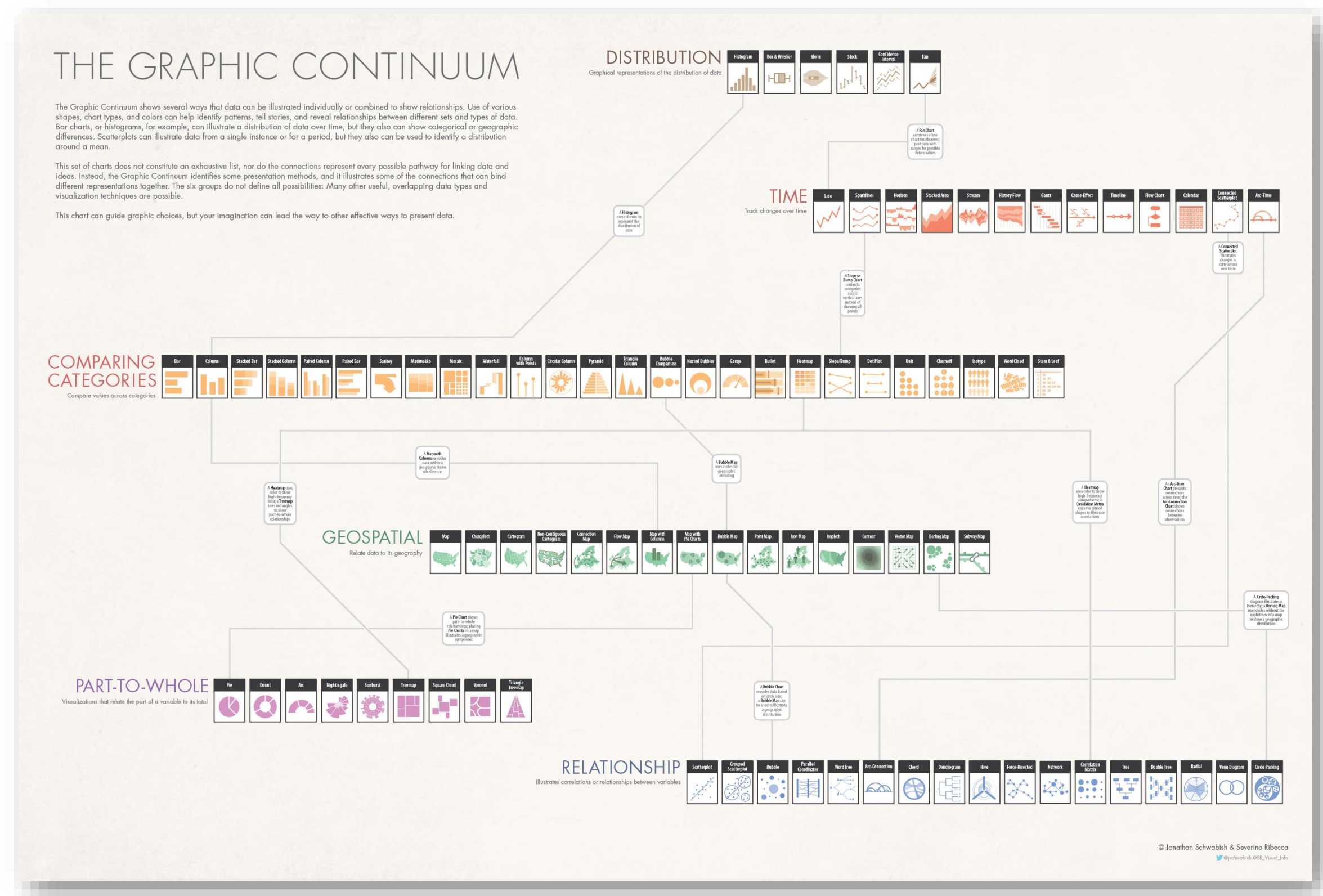
The DataViz Cat

53 abonnés

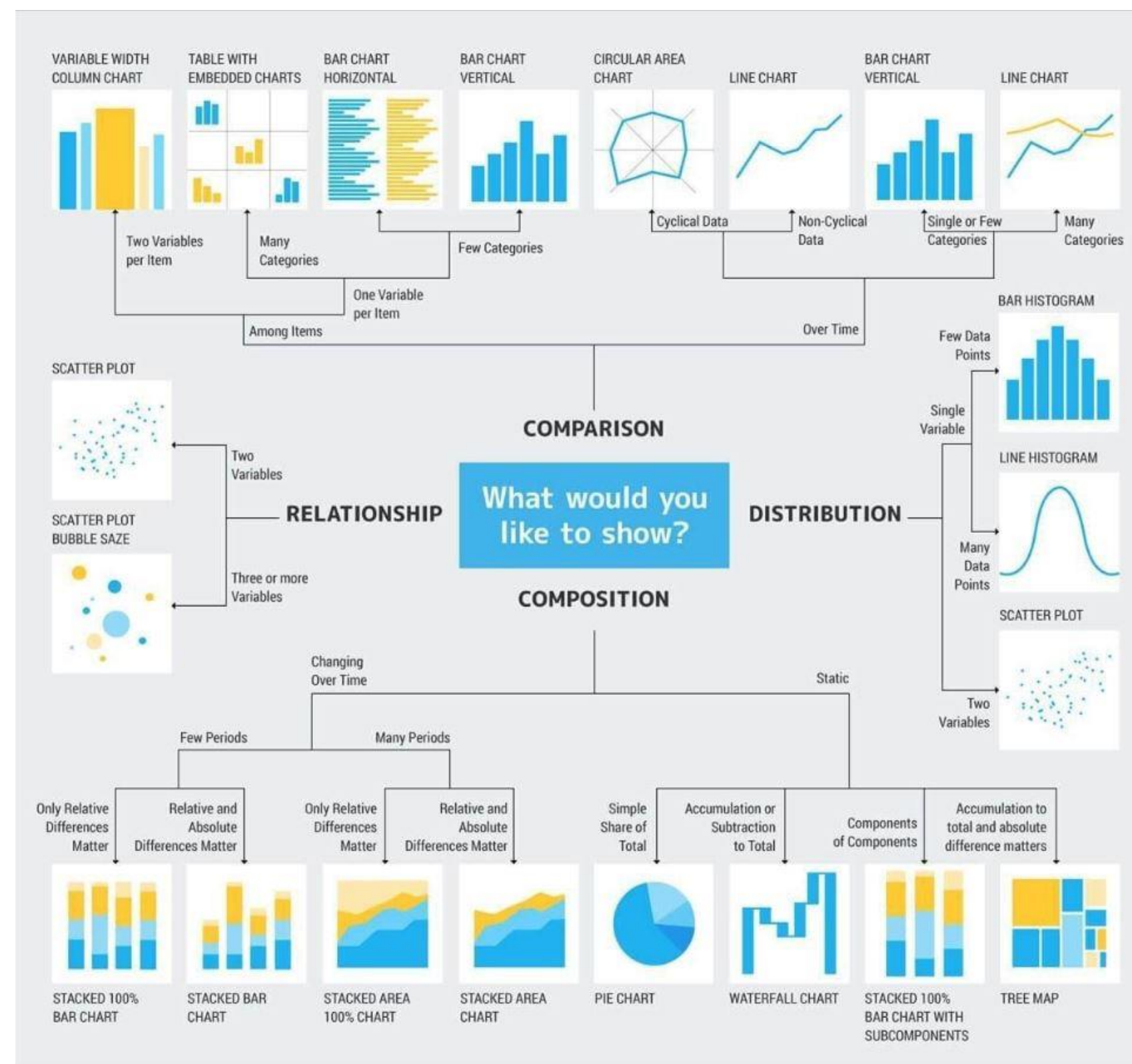
<https://www.youtube.com/channel/UCp8B-ax3dEMIThJqvBTqLeQ>



# Graph Continuum

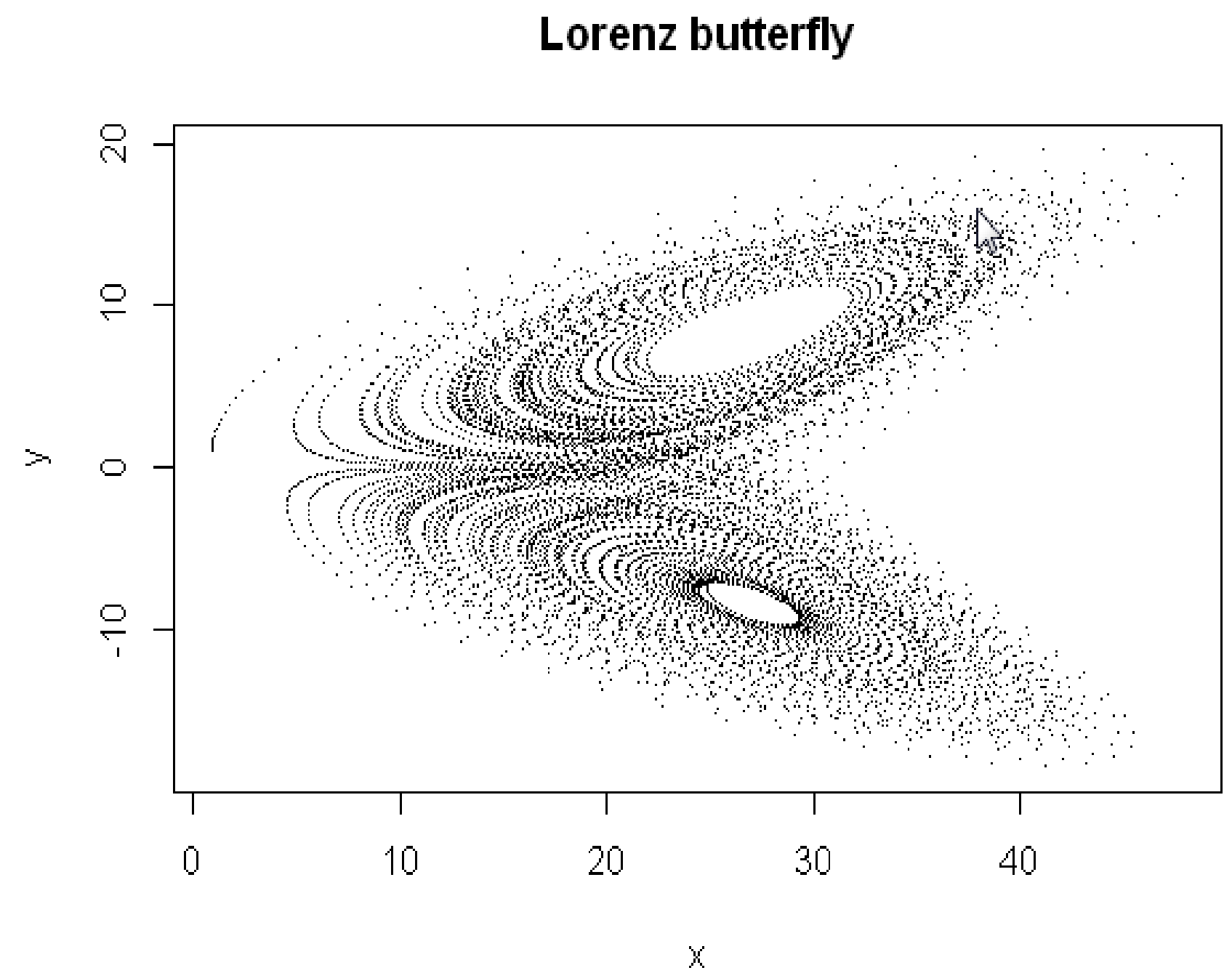
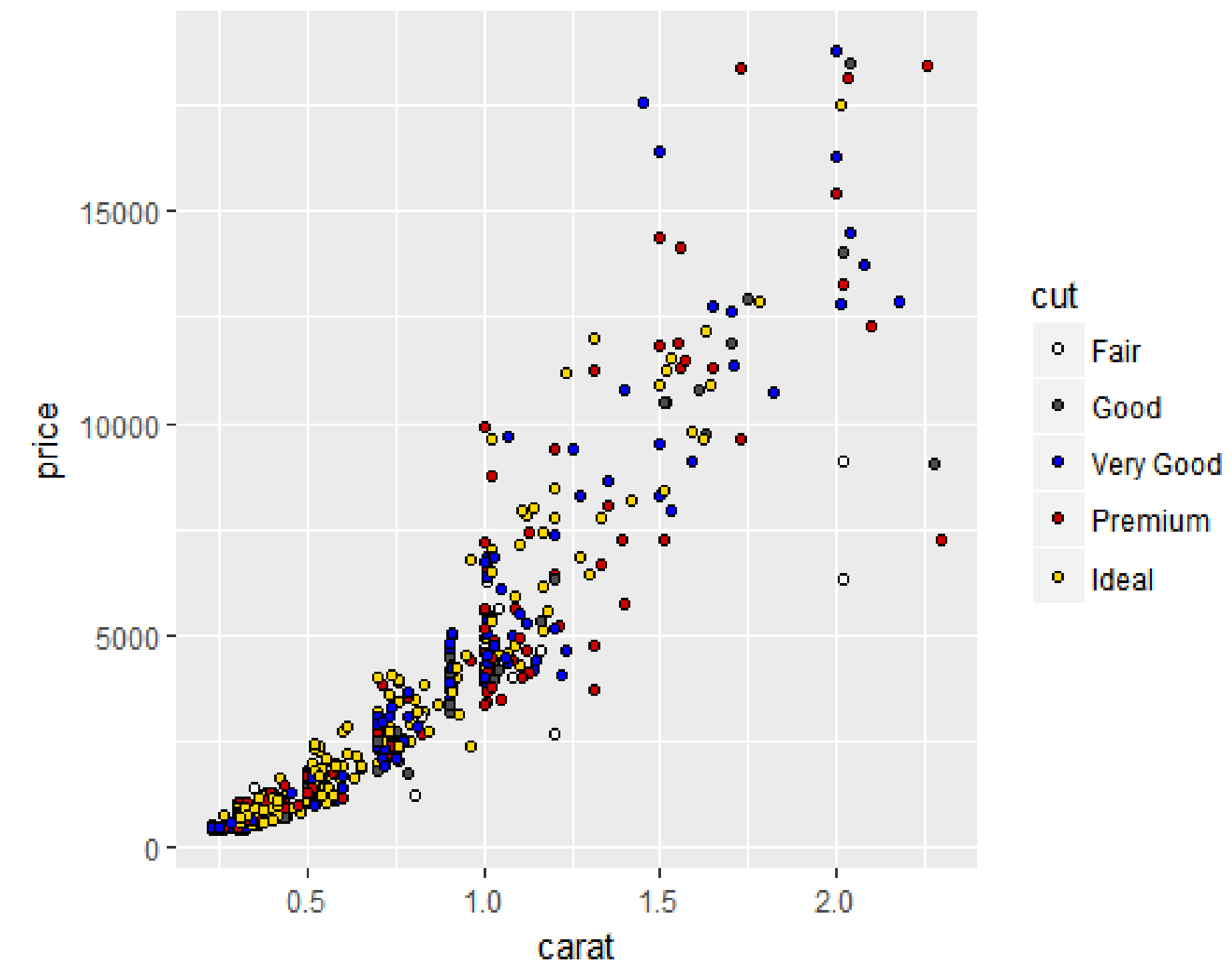


Other...



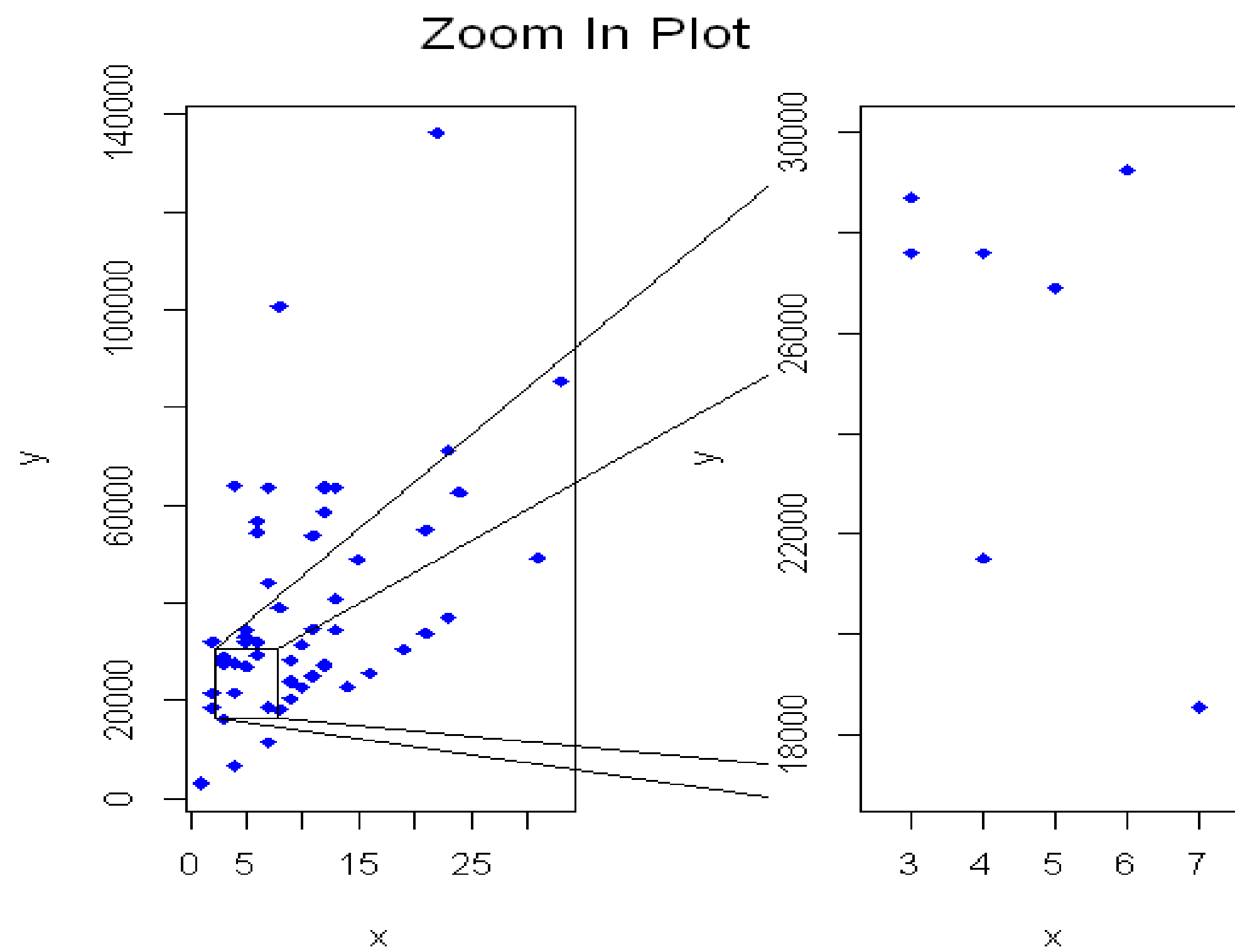
# Dot and Vector Charts

# Dots cloud charts

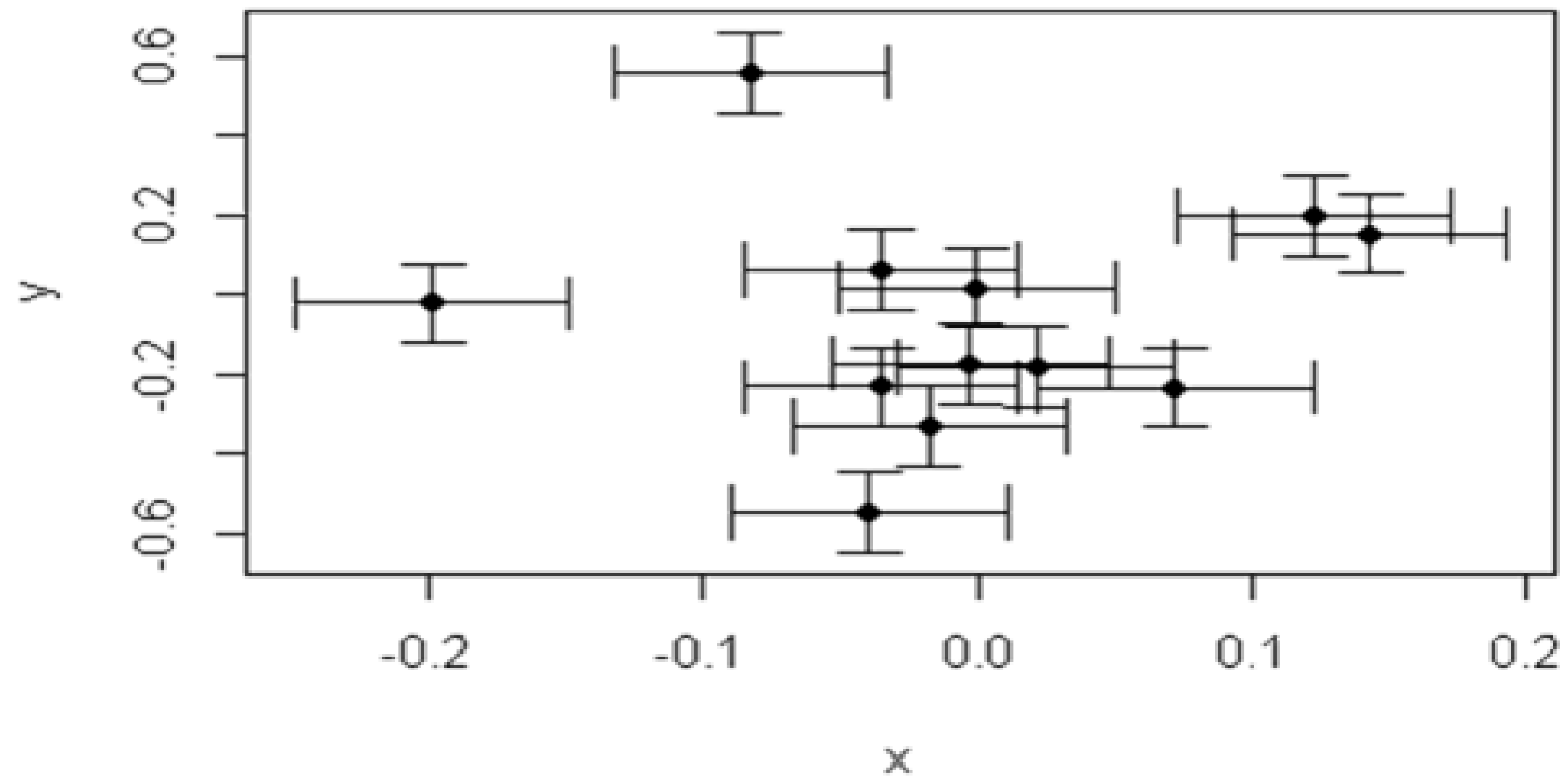




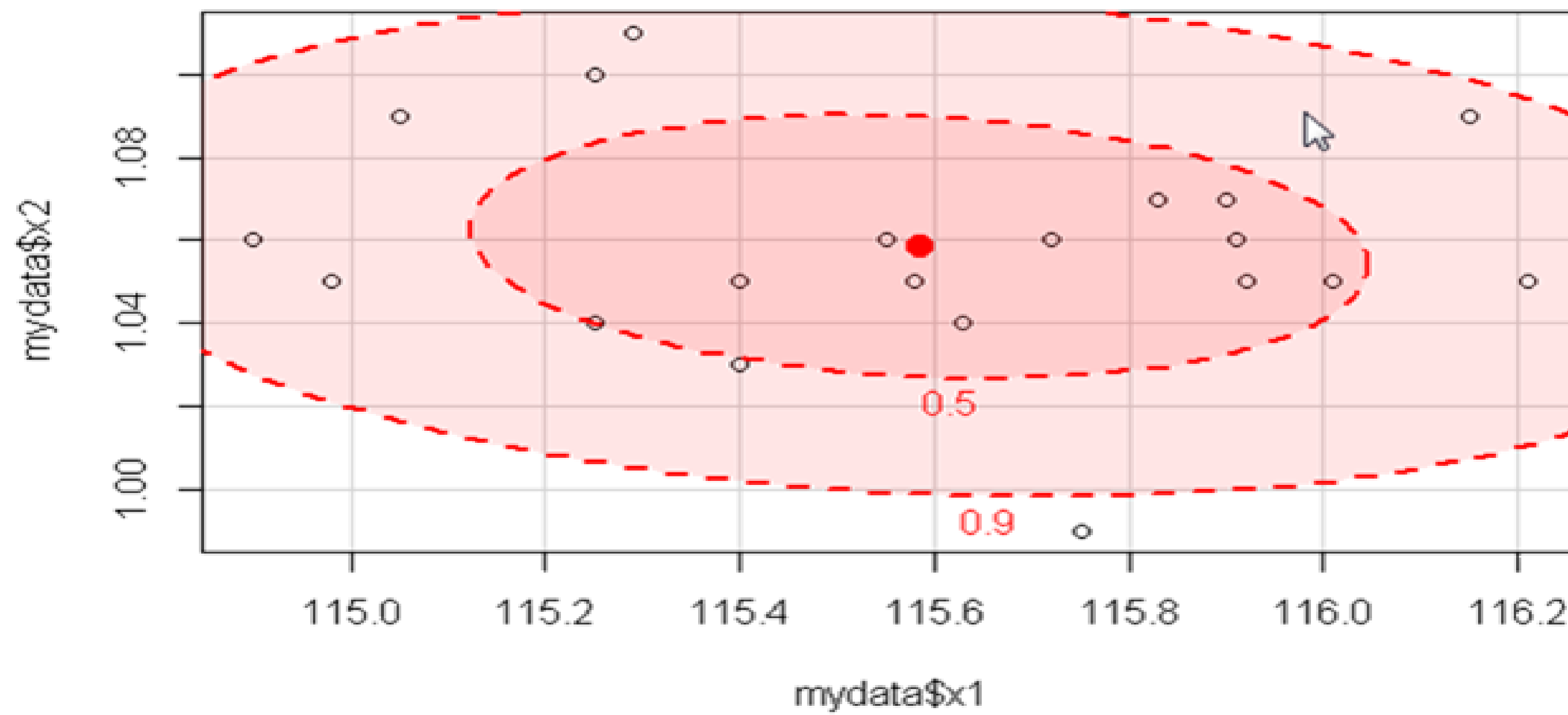
## Dots chart with zoom effect



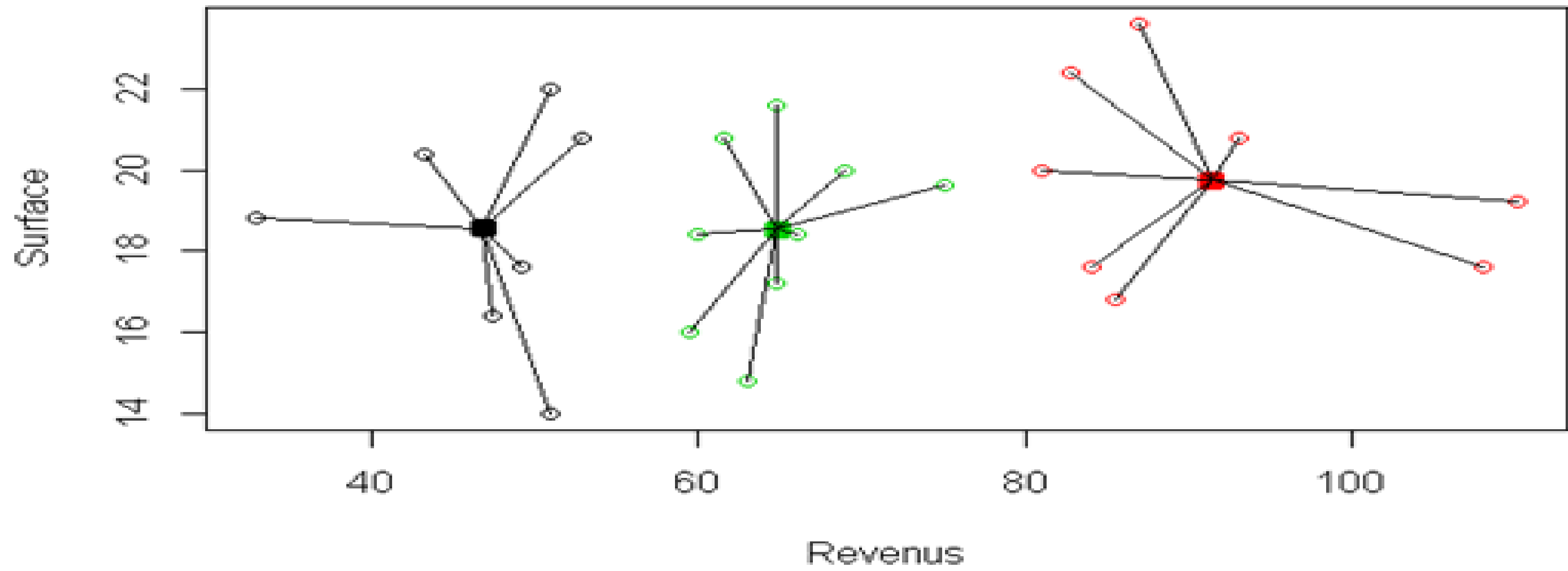
## Error bars dots chart



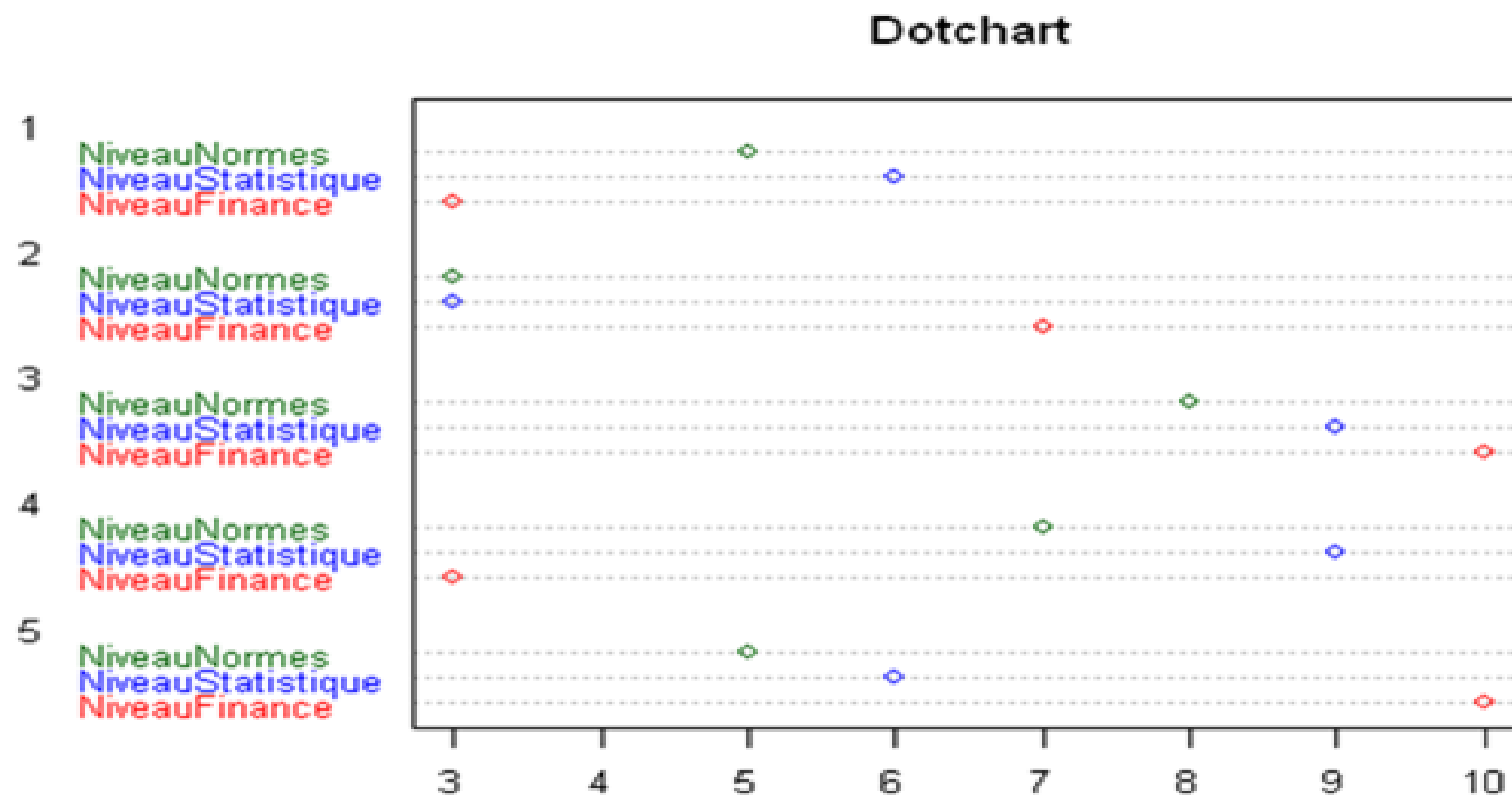
## Ellipse of confidence chart (Youden chart)



## Stars chart



# Cleveland chart



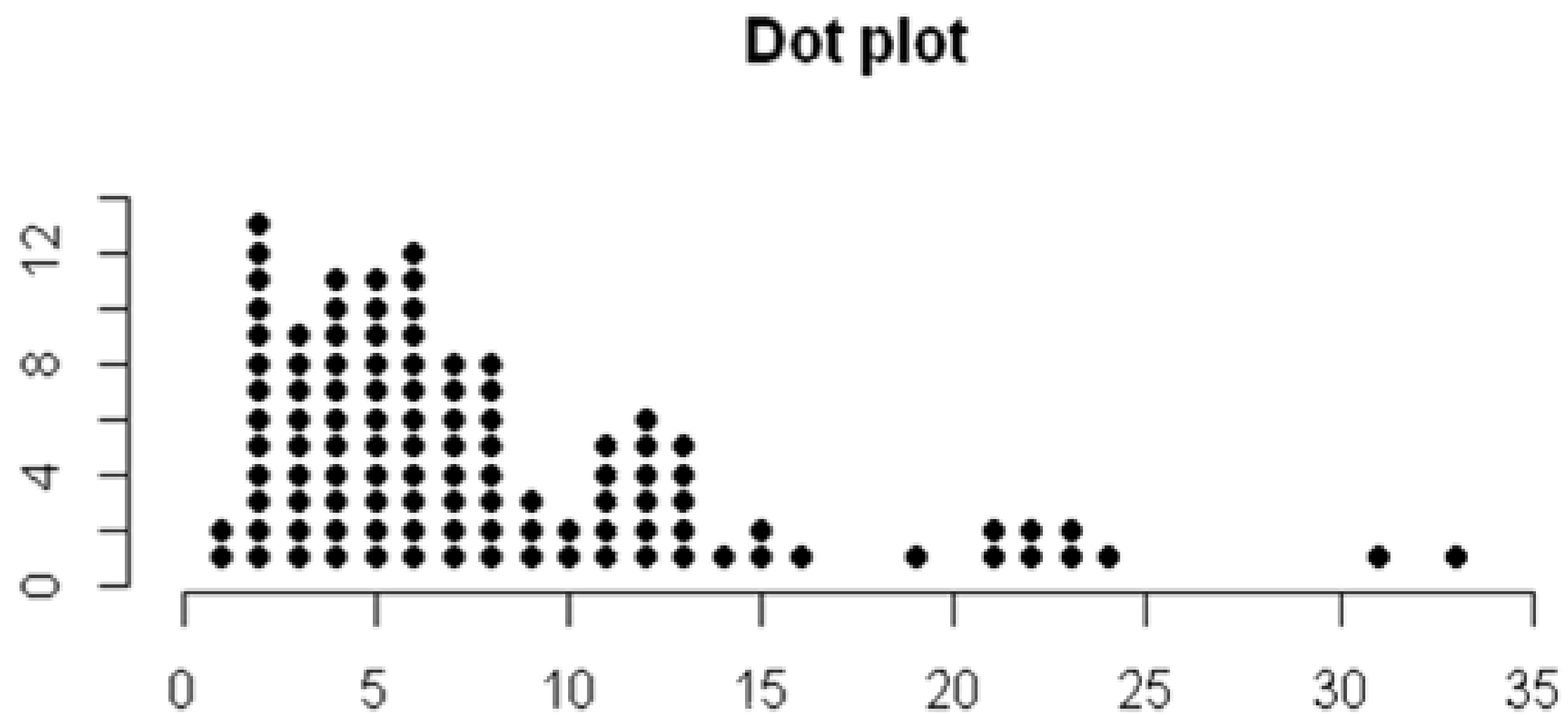


# Stem-and-Leaf chart

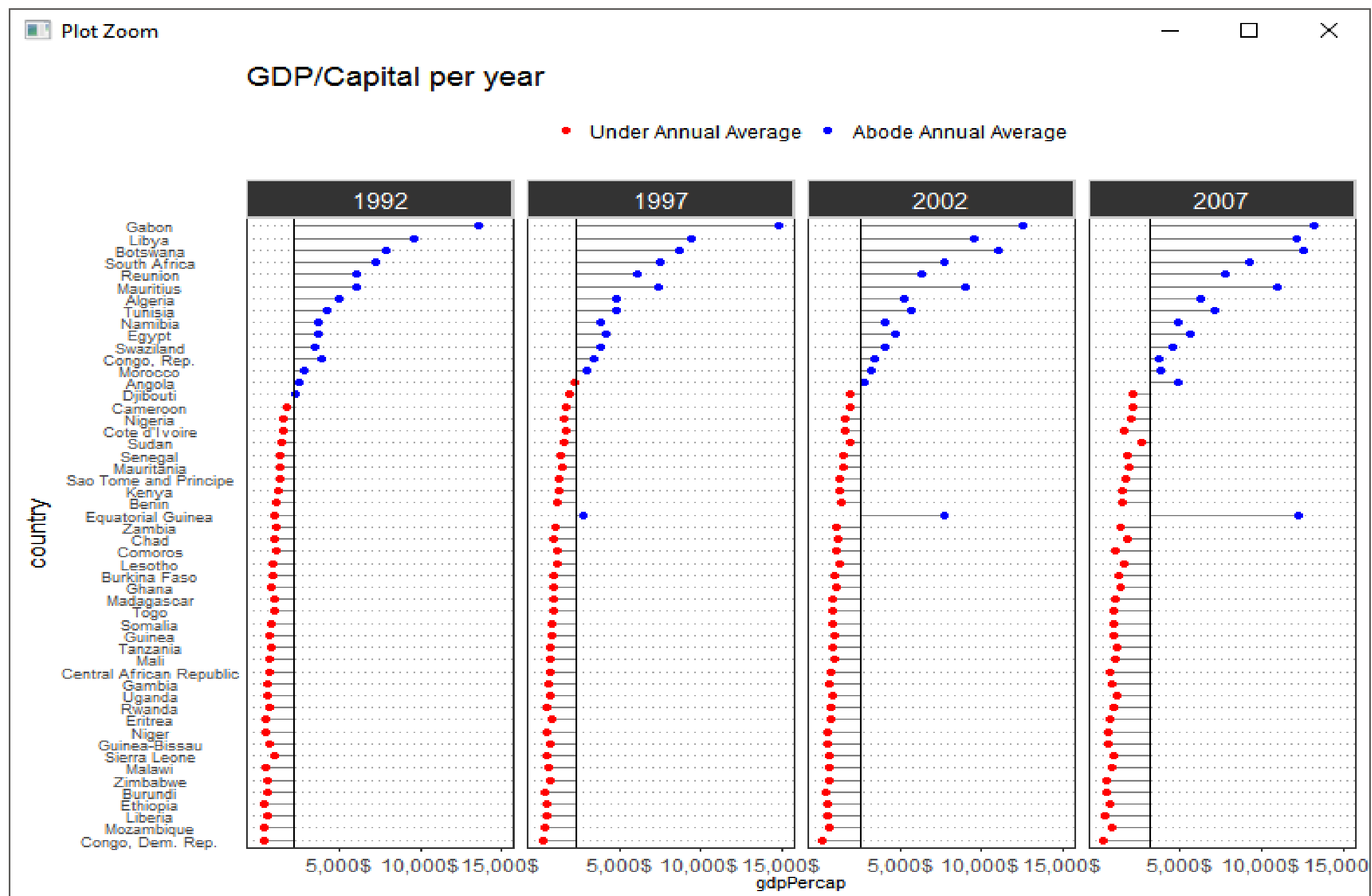
The decimal point is at the |

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1 | 0122333333344444444444444
1 | 5555555555555566666666777799
2 |
2 |
3 | 033
3 | 55678999
4 | 000001112222334444
4 | 5555555566677777888899999
5 | 000011111111223344
5 | 55566666677788899
6 | 0011134
6 | 6779
```

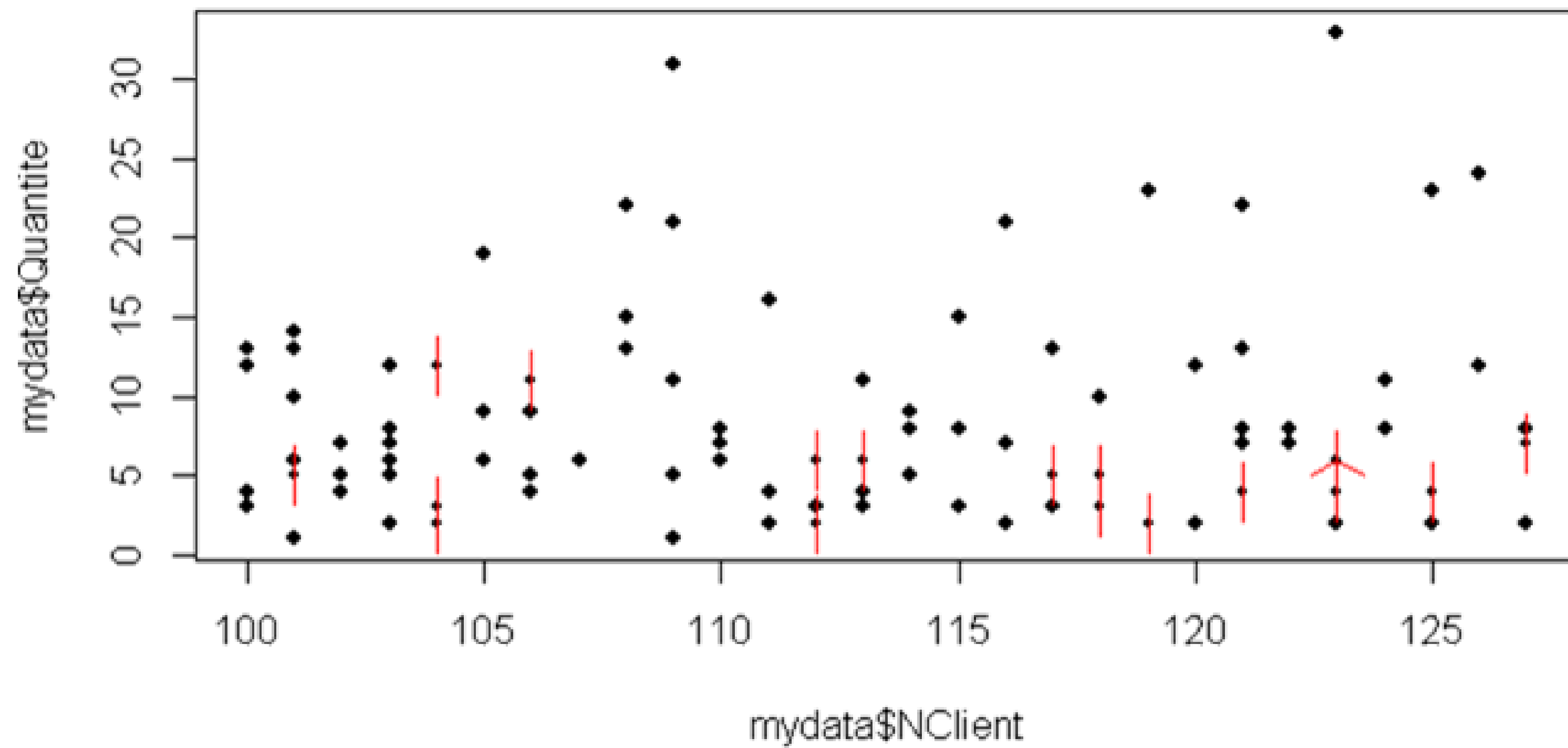
## Dot plot chart



# Lollipop charts

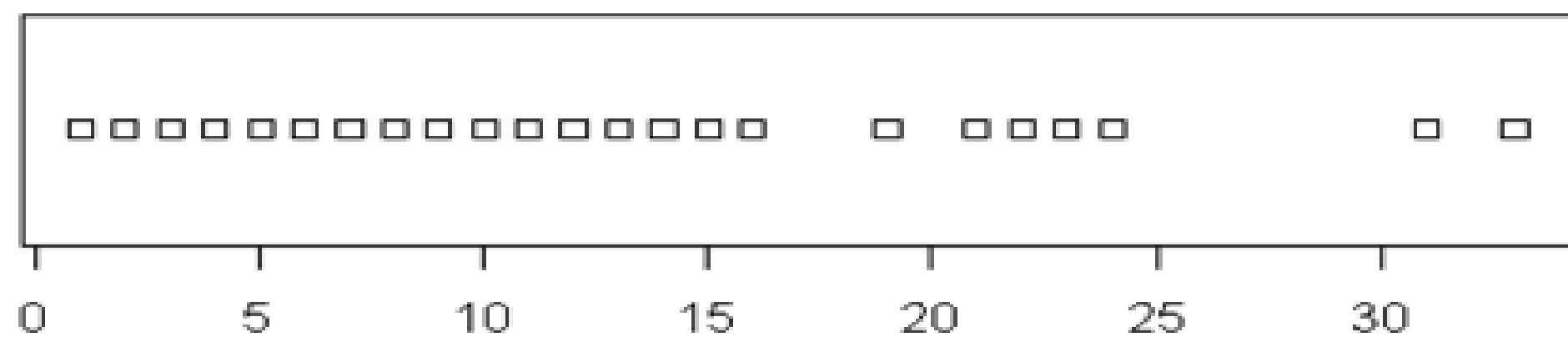


## Sunflowers charts

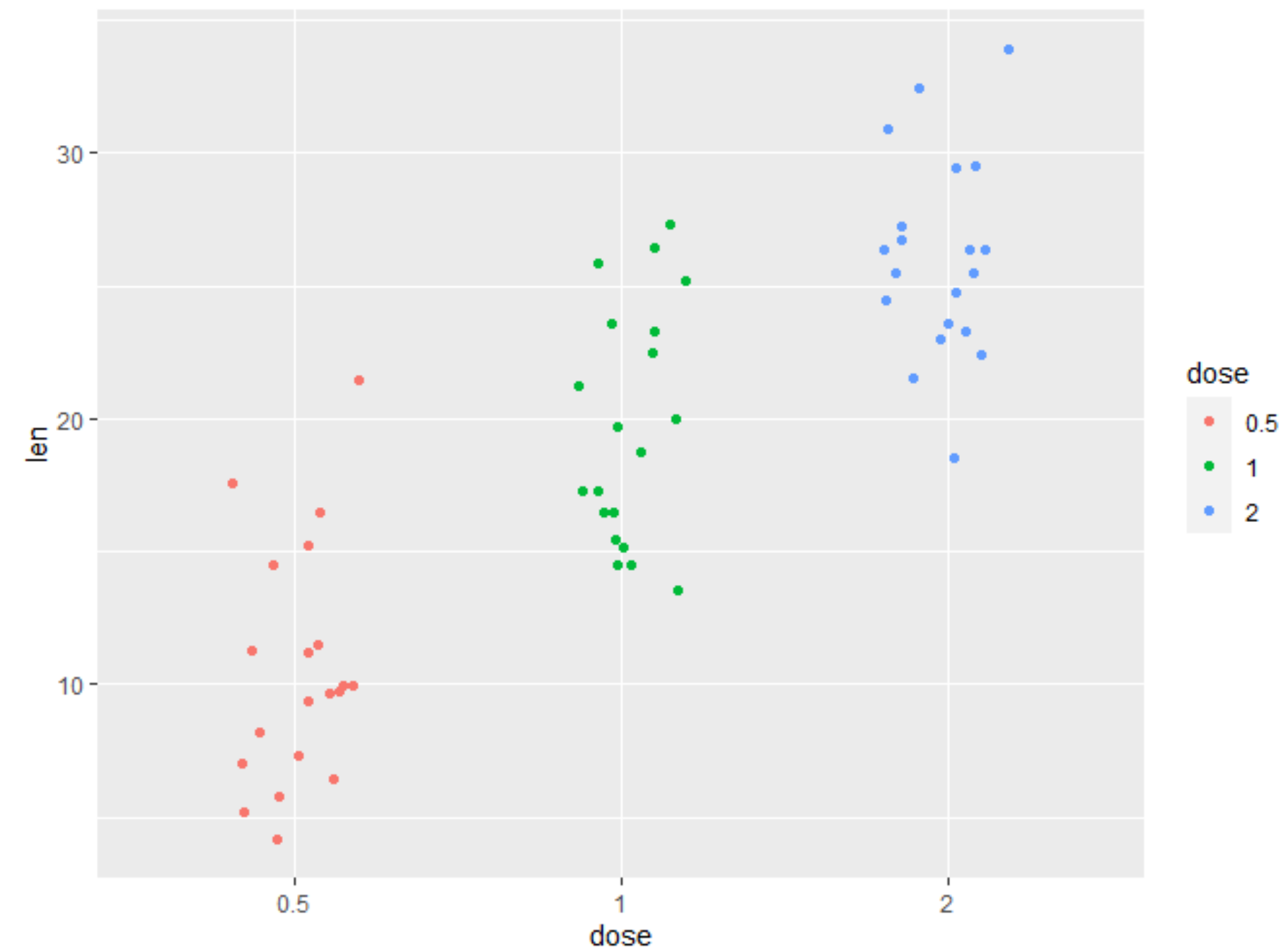
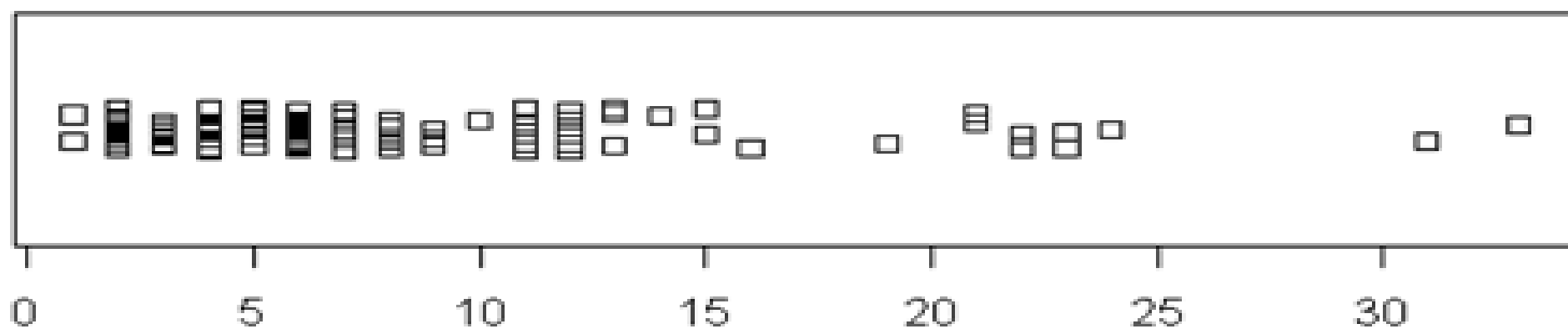


# Stripchart (Jitters chart)

**Stripchart Quantités**

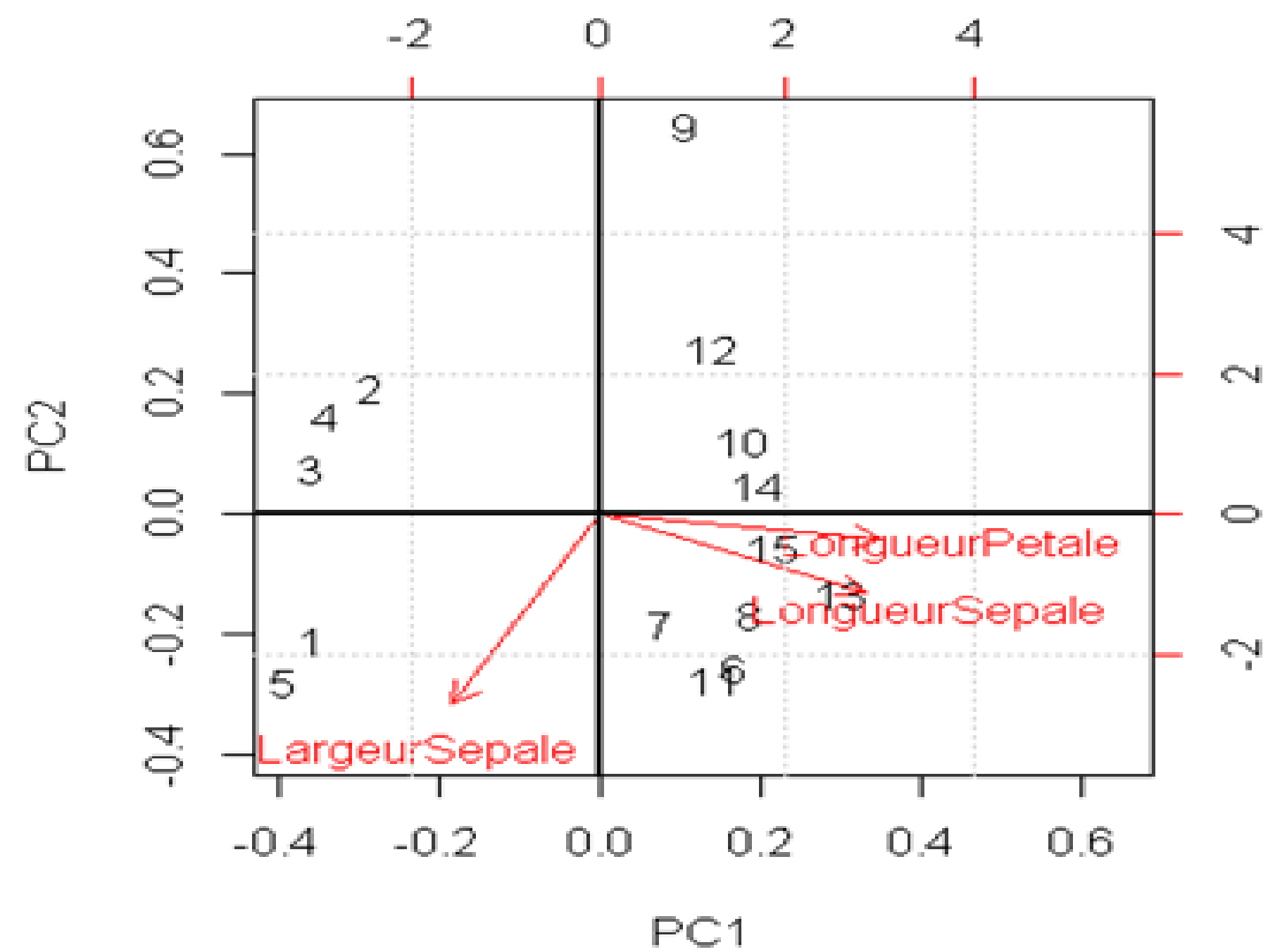
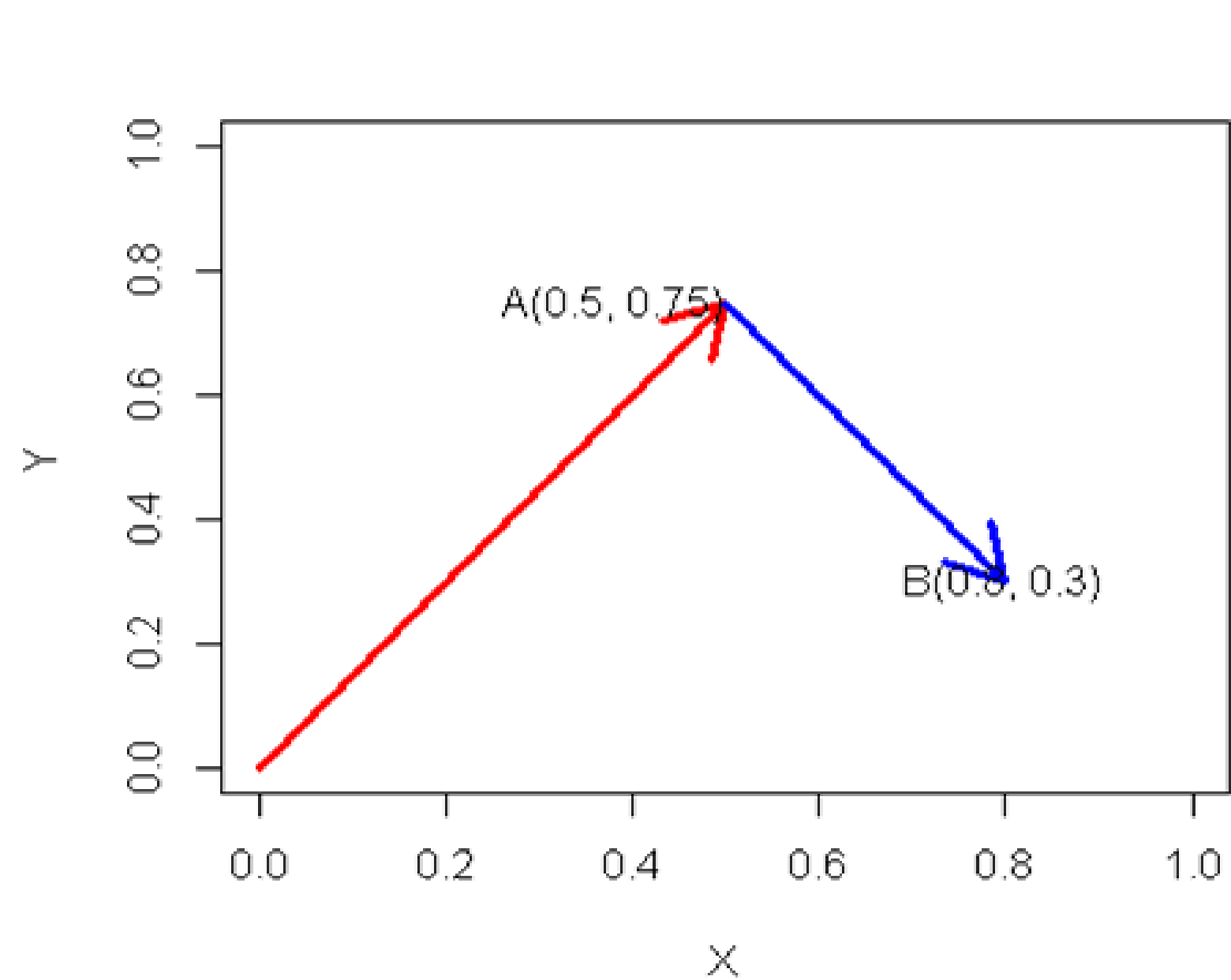


**Stripchart Quantités**

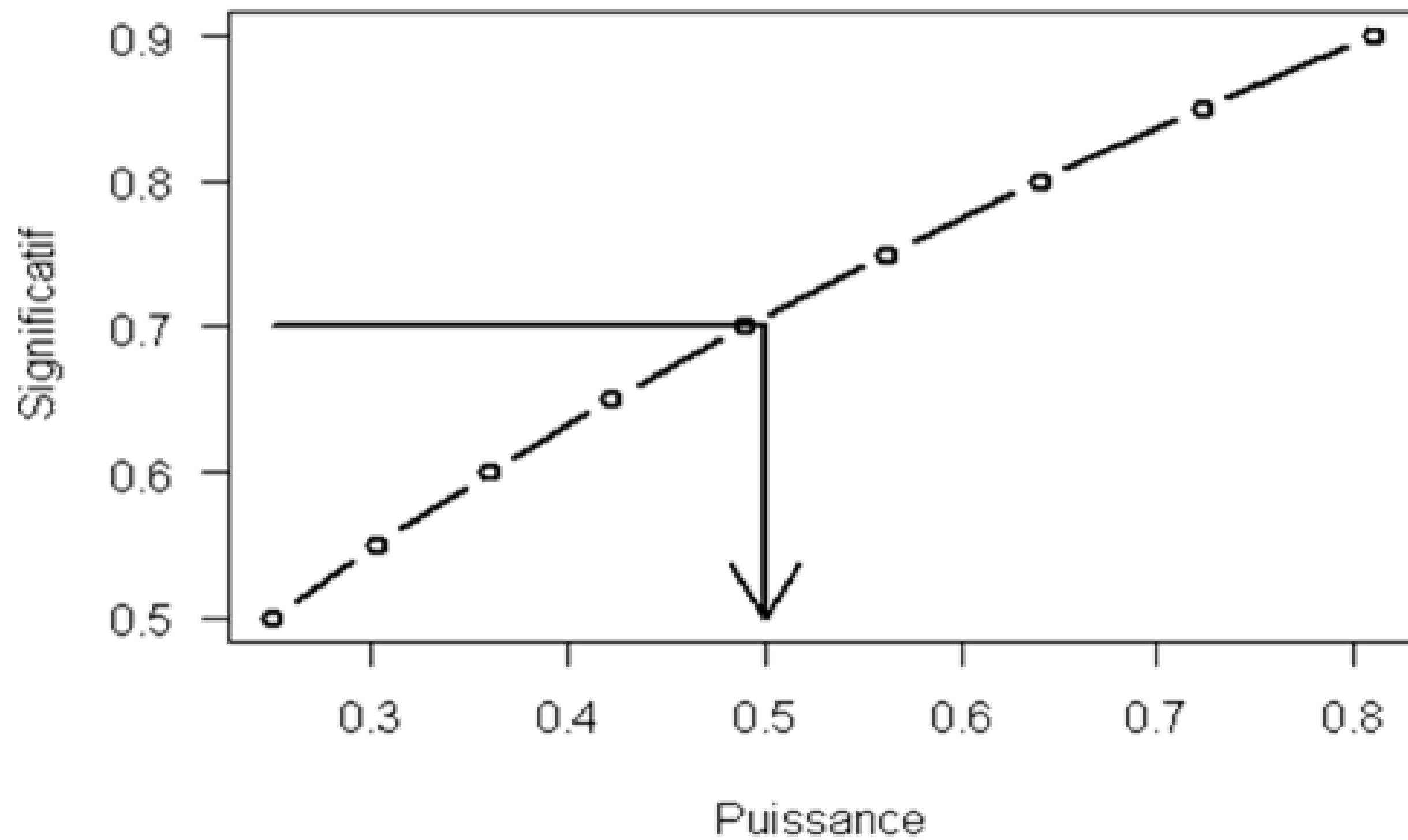




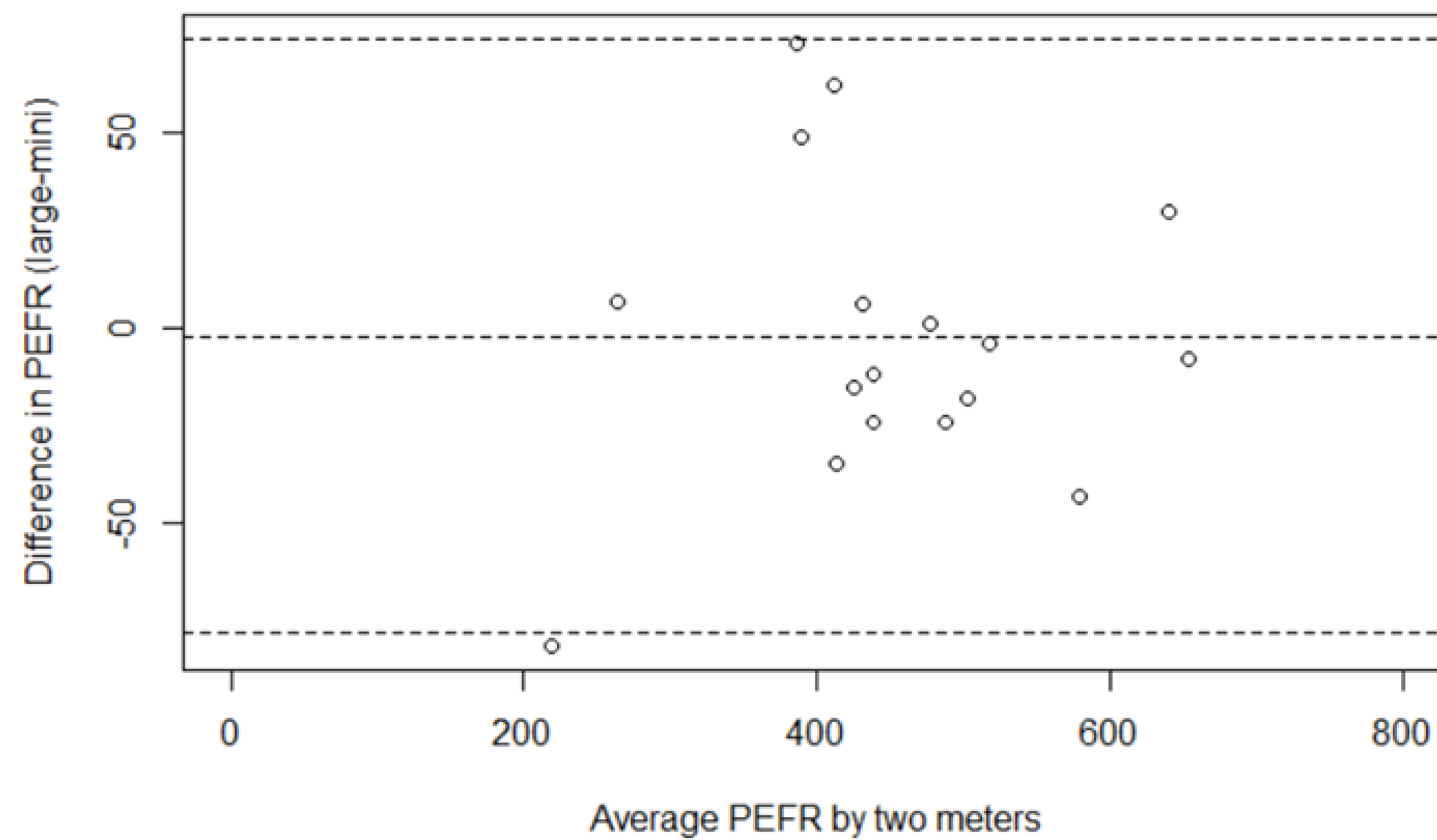
# Vectors charts



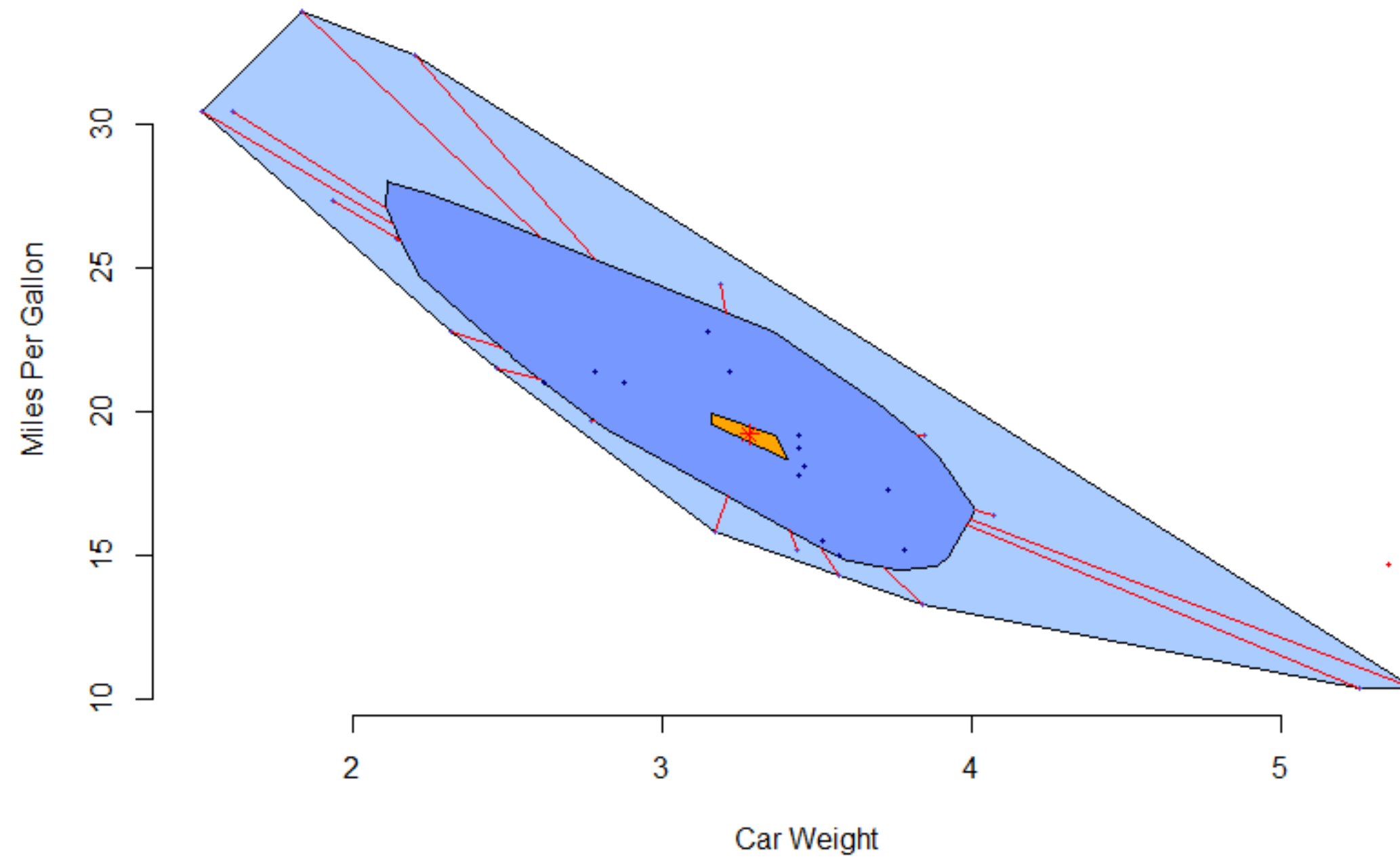
## Mixture vectore chart with dot-line chart



# Bland-Altman Control Chart



# Bagplot

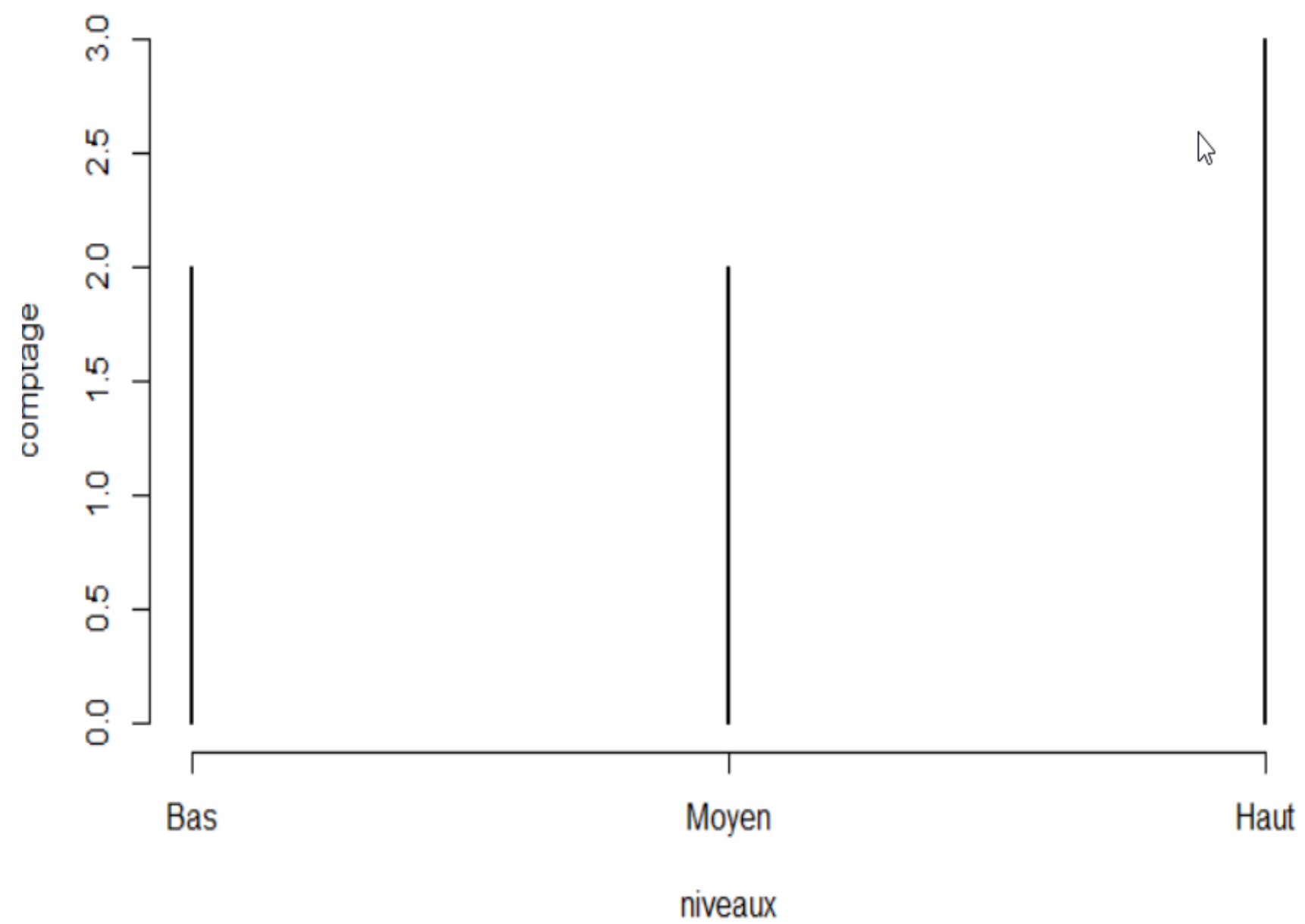


# Bar Charts

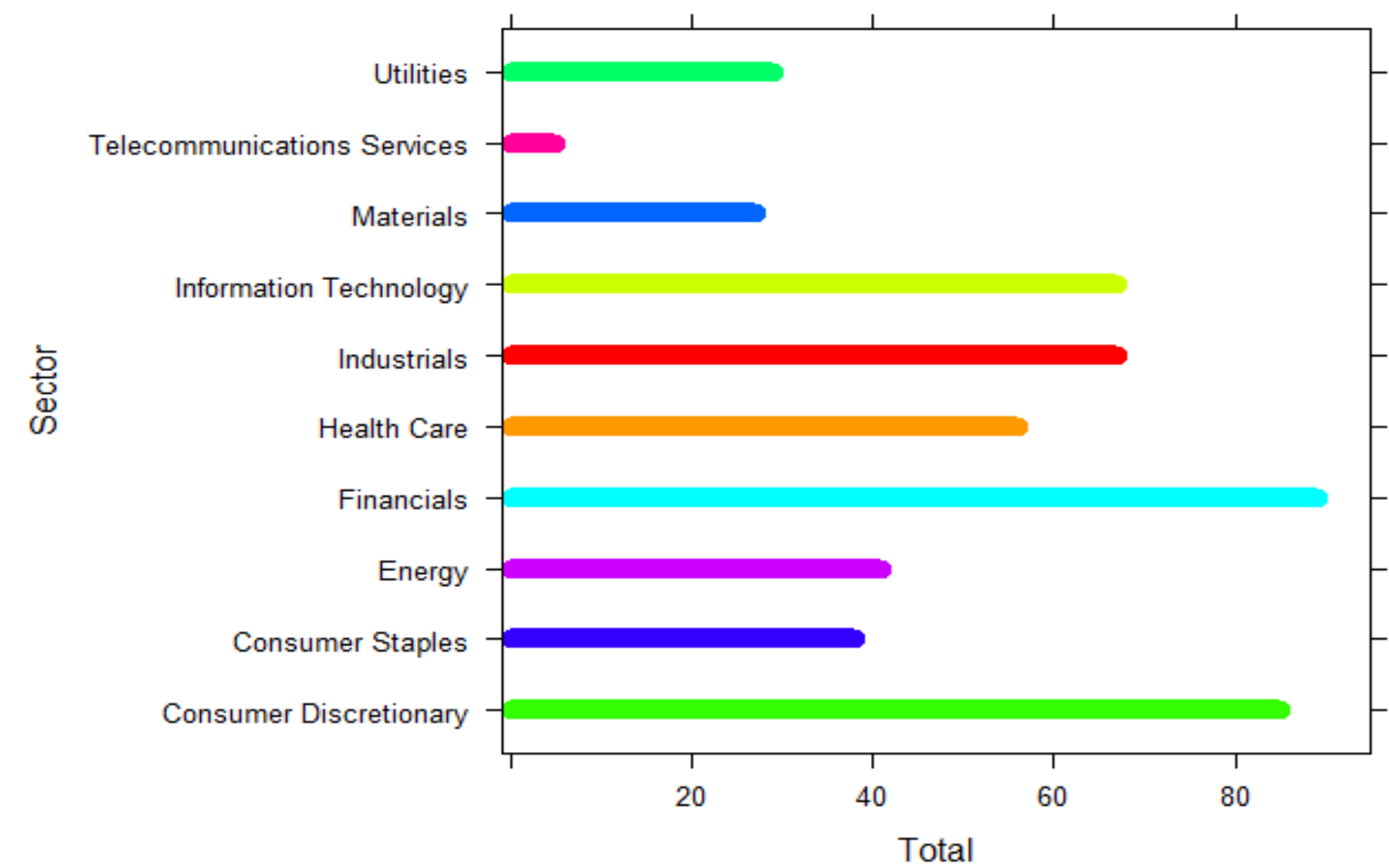


# Sticks charts

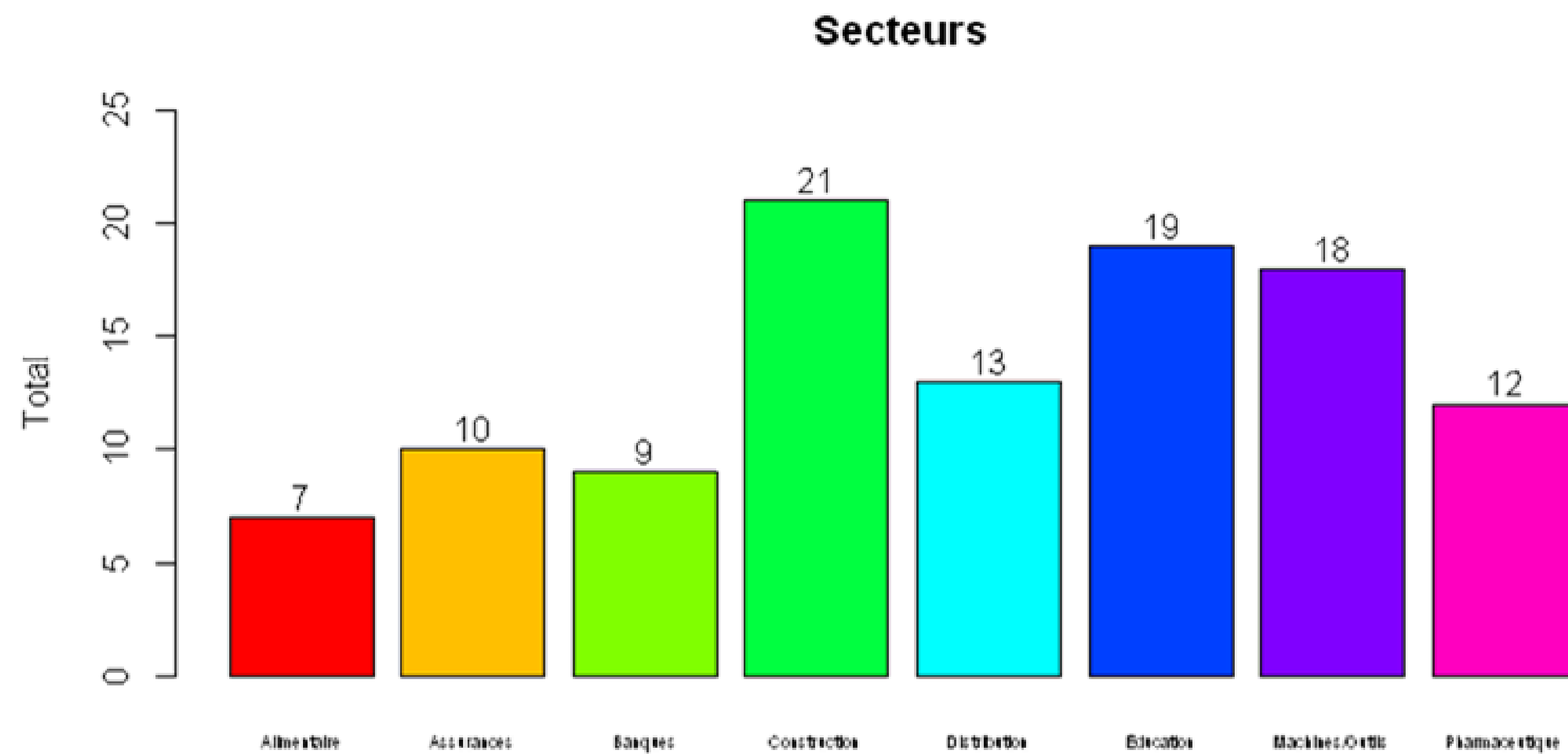
Variable ordinale



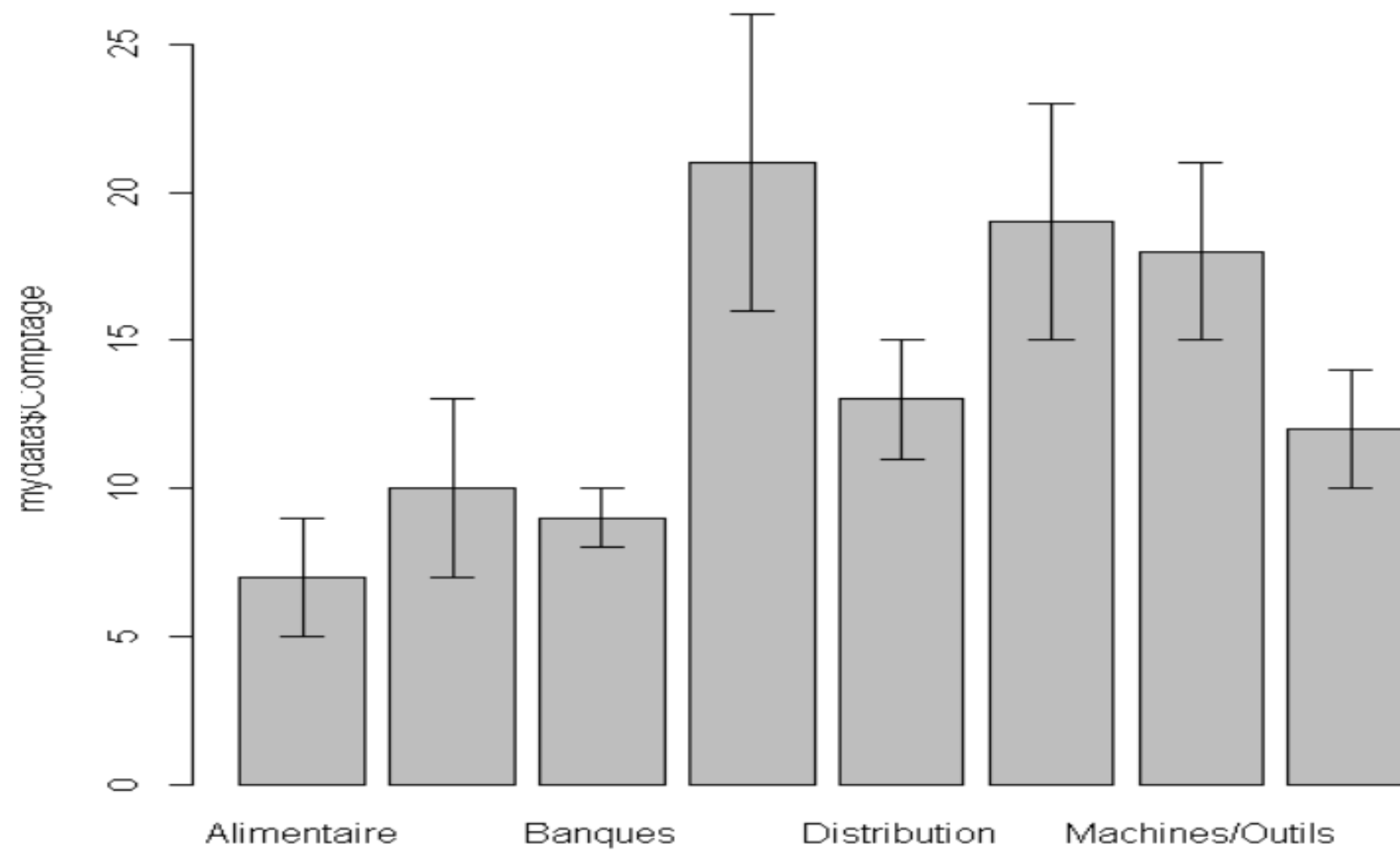
Effectif par secteur



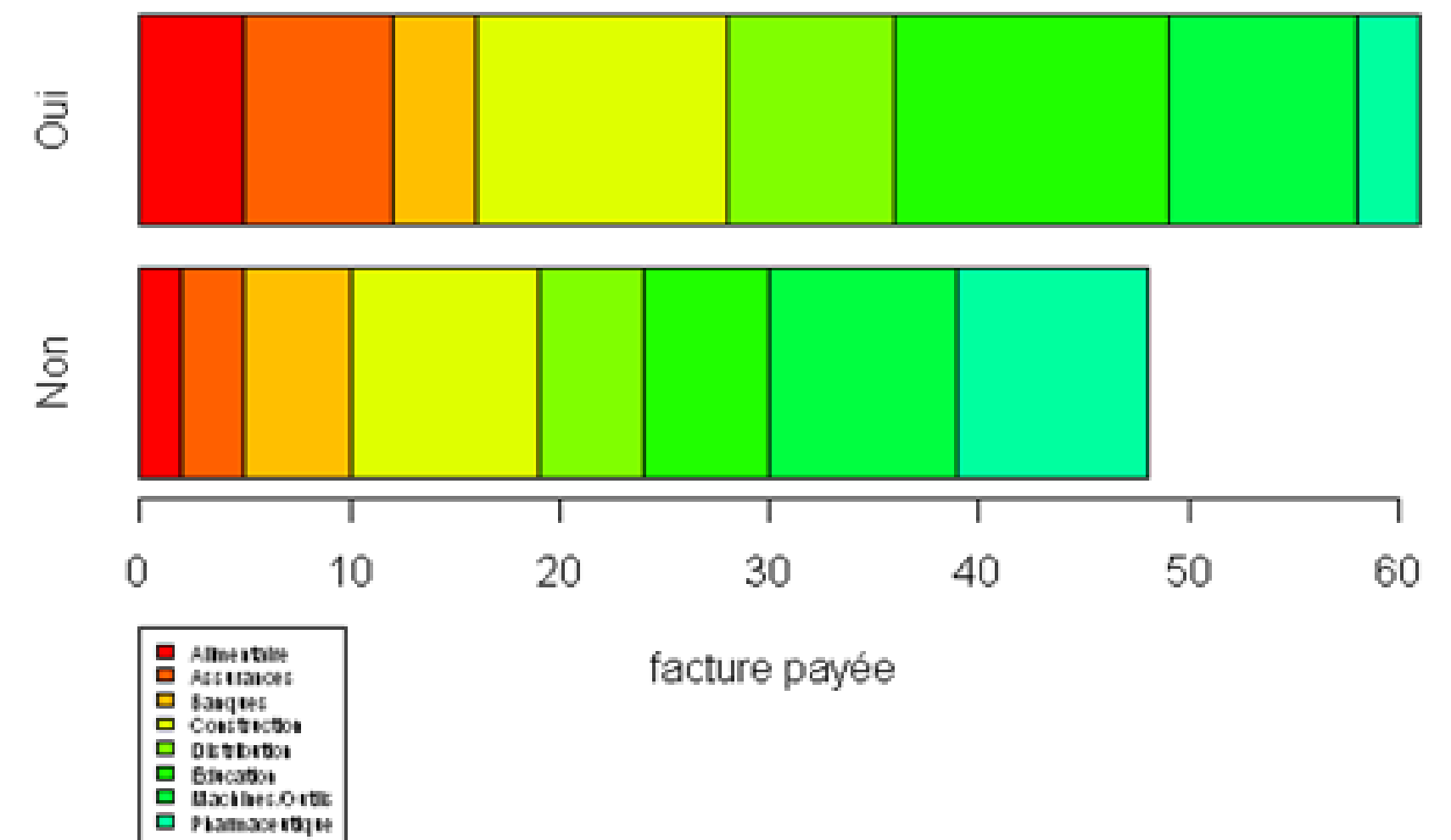
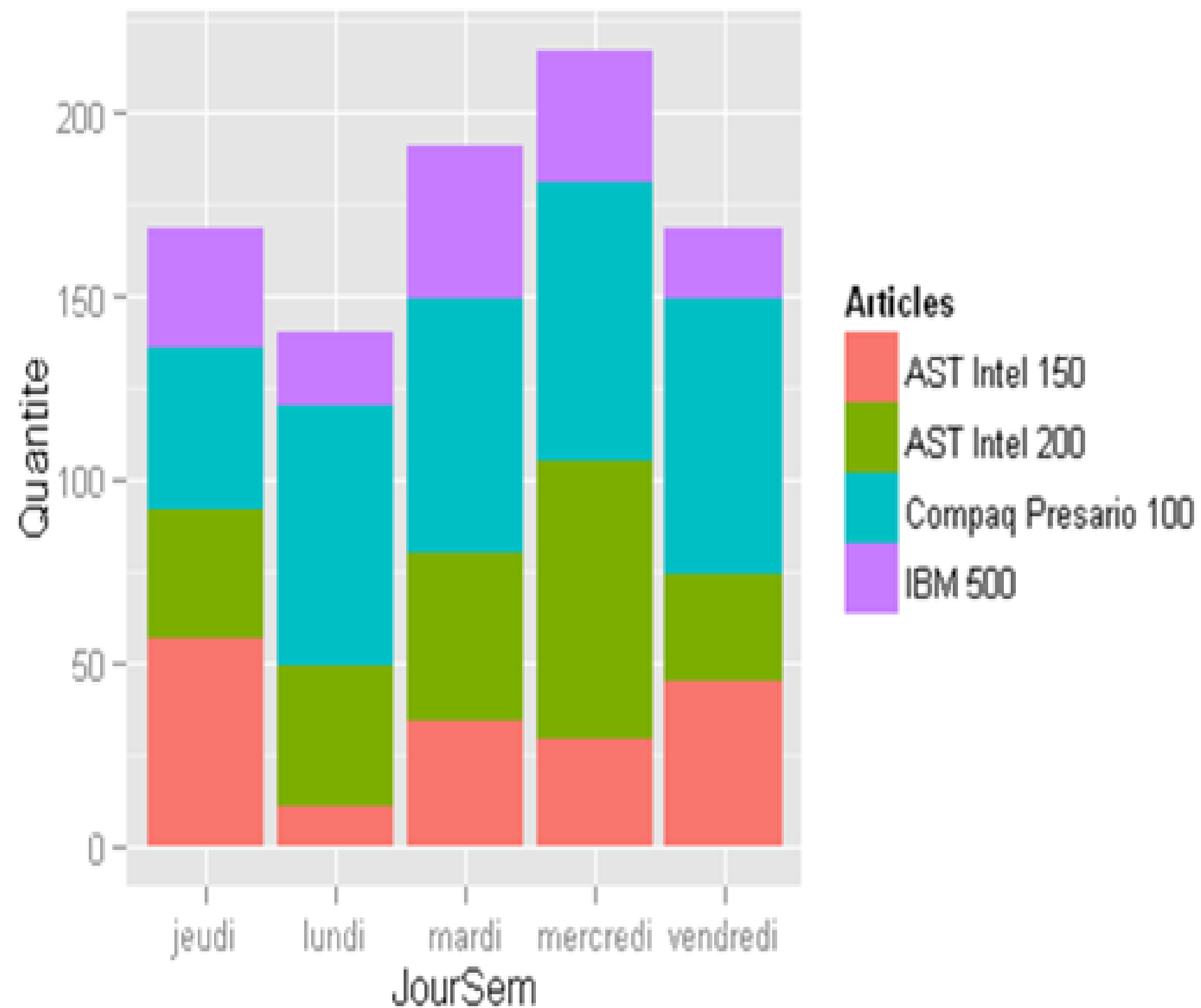
# Bar chart



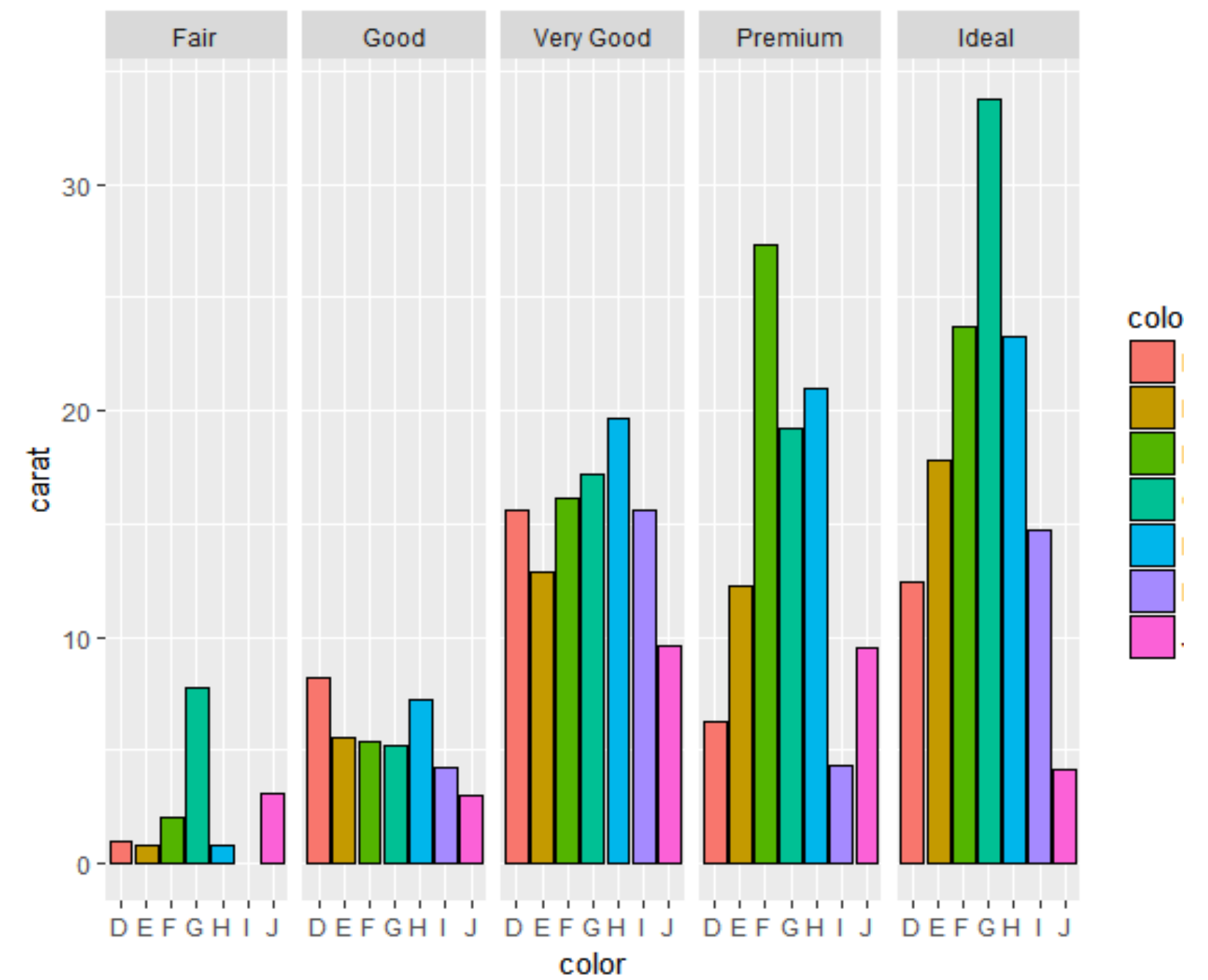
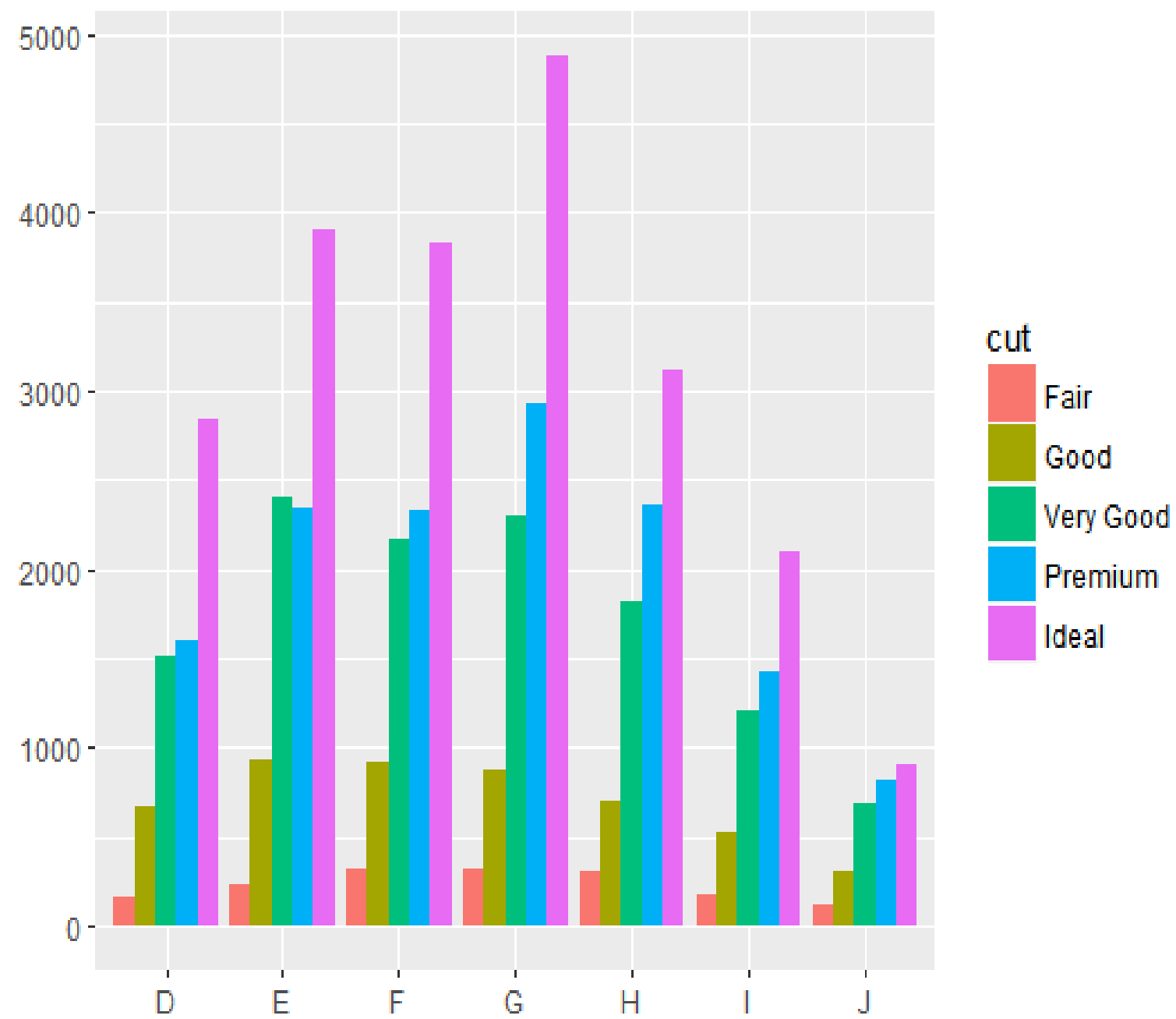
## Bar chart with error bars



## Cumulated bar charts (stacked bar charts)

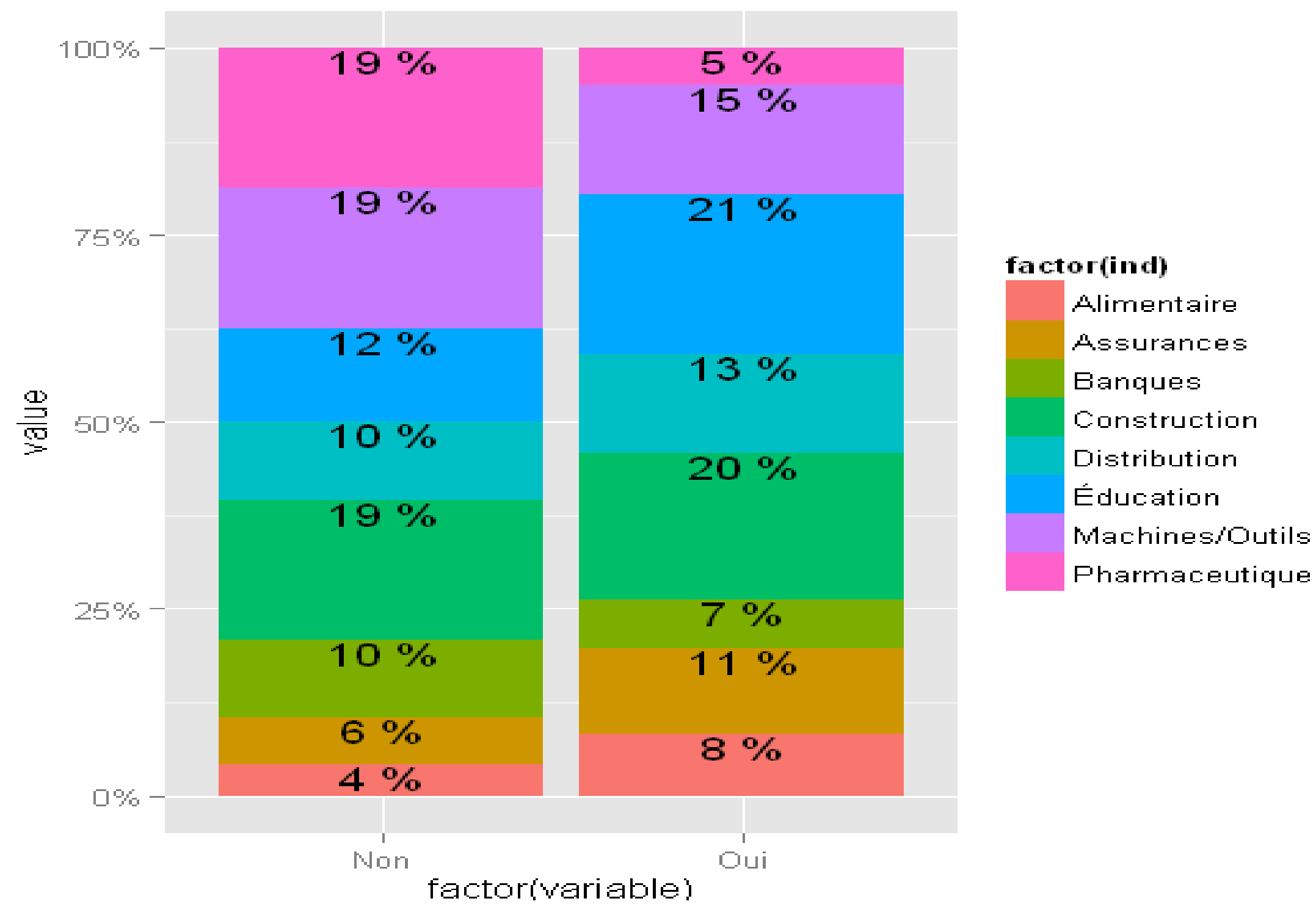


# Grouped bar charts

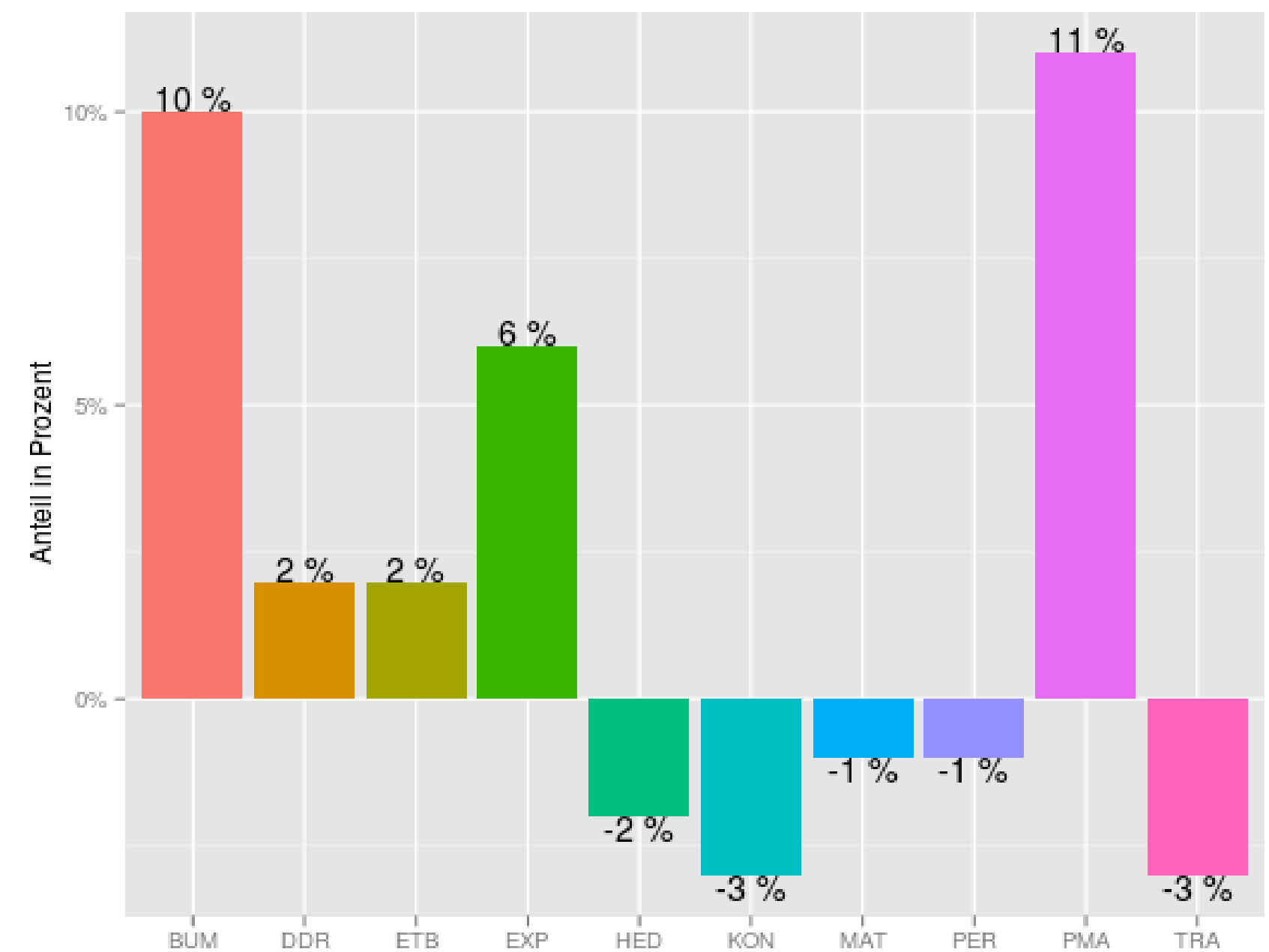
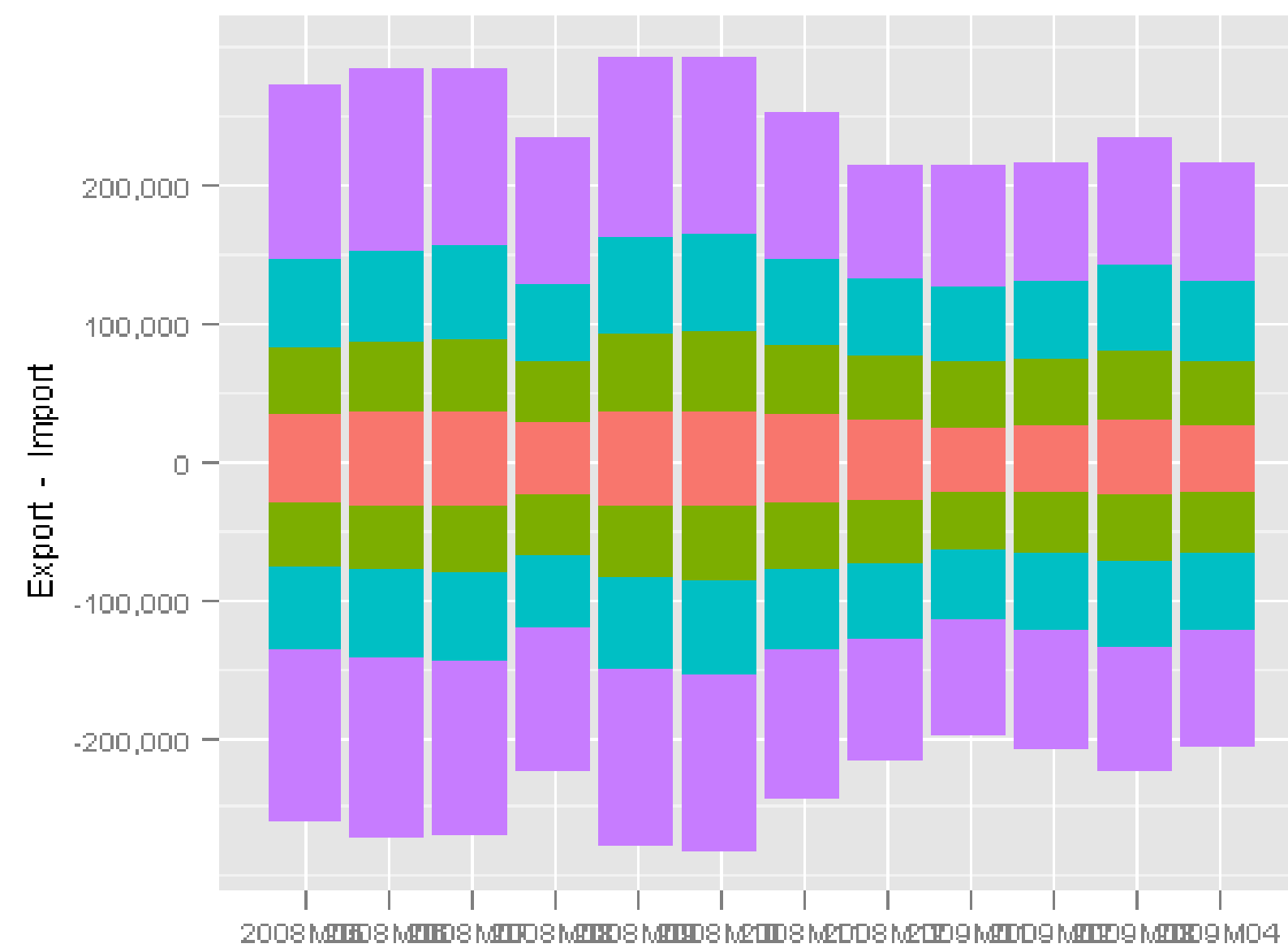




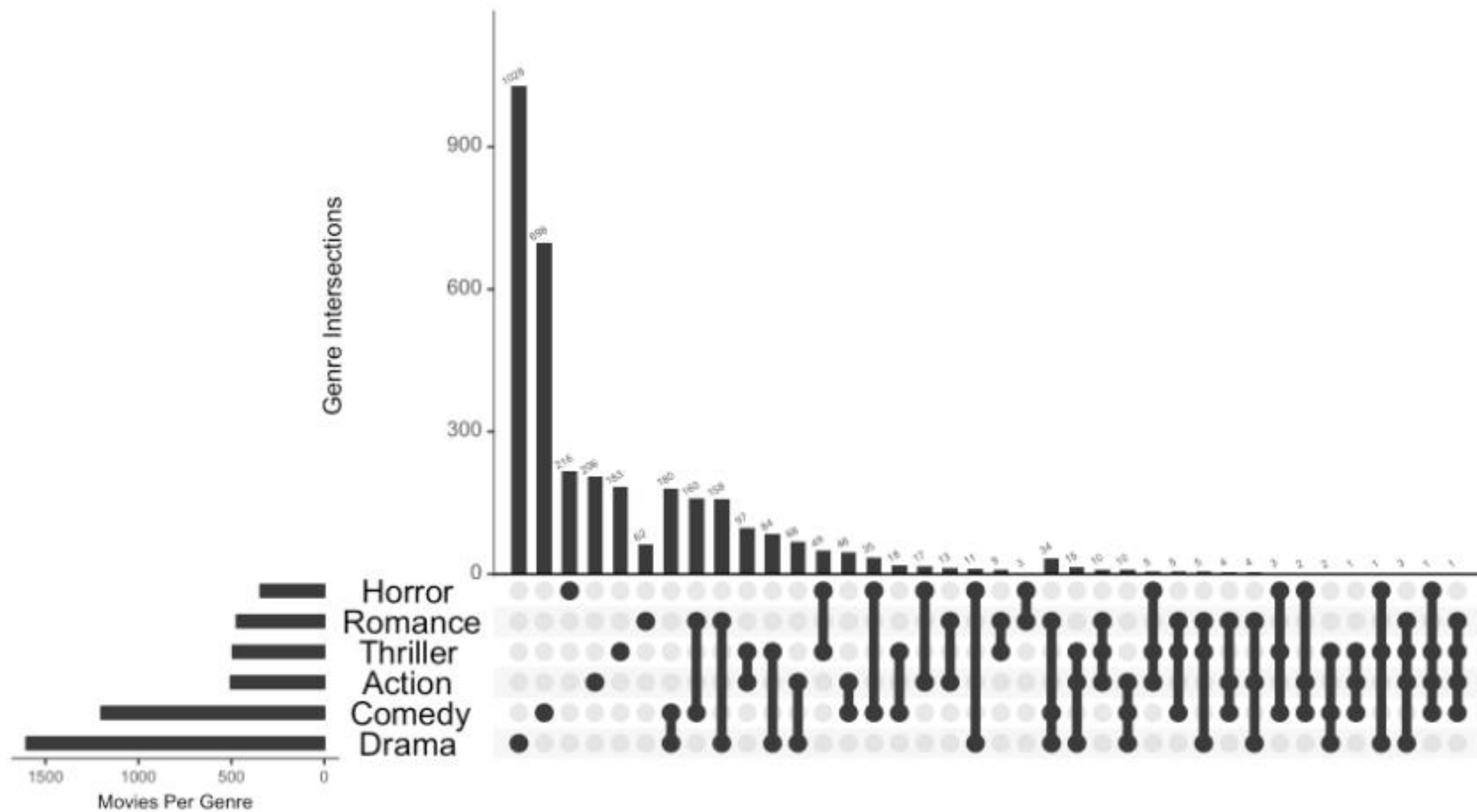
## Standardized bar chart (normalized bar chart)



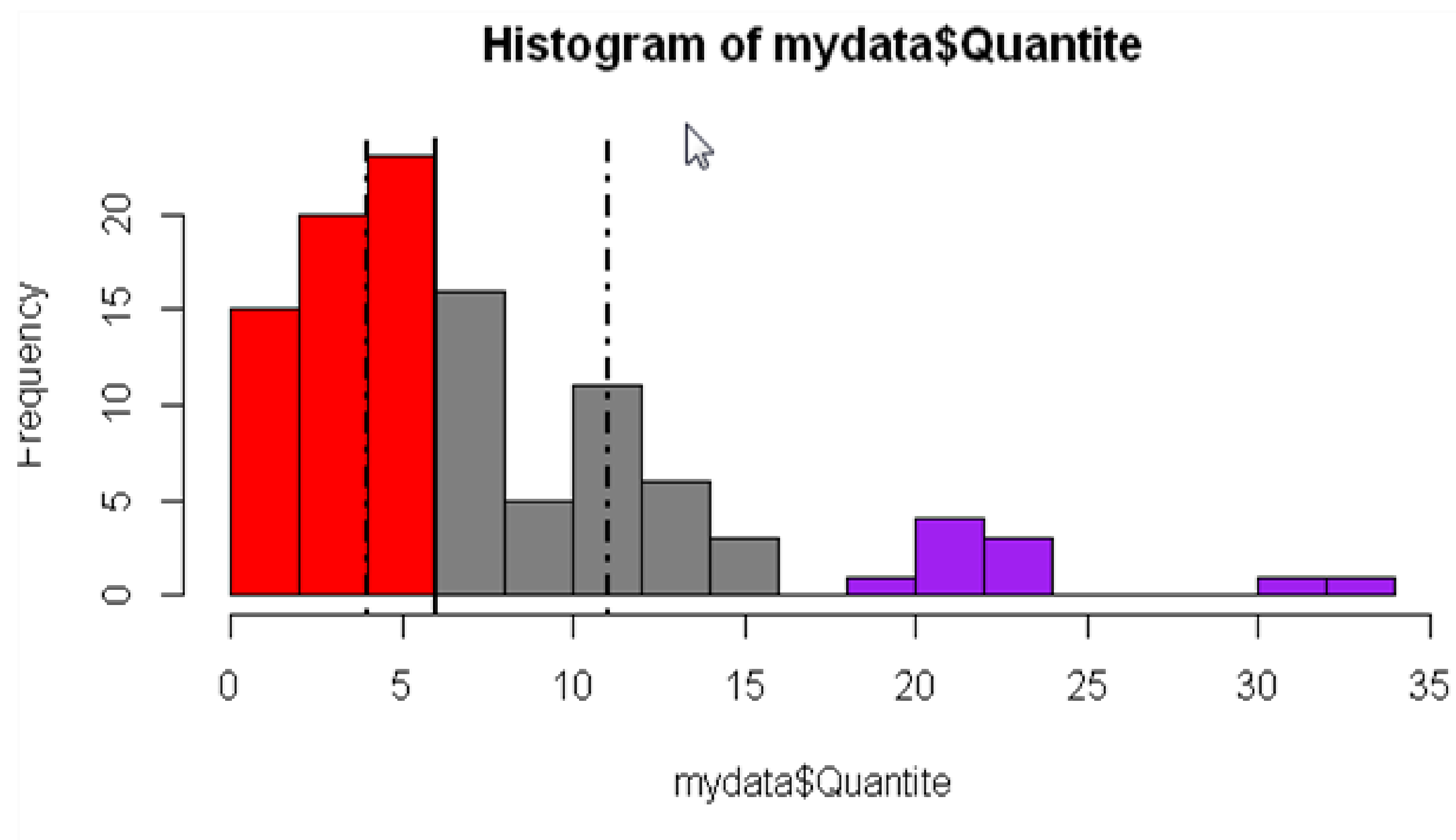
## Back to back bar charts



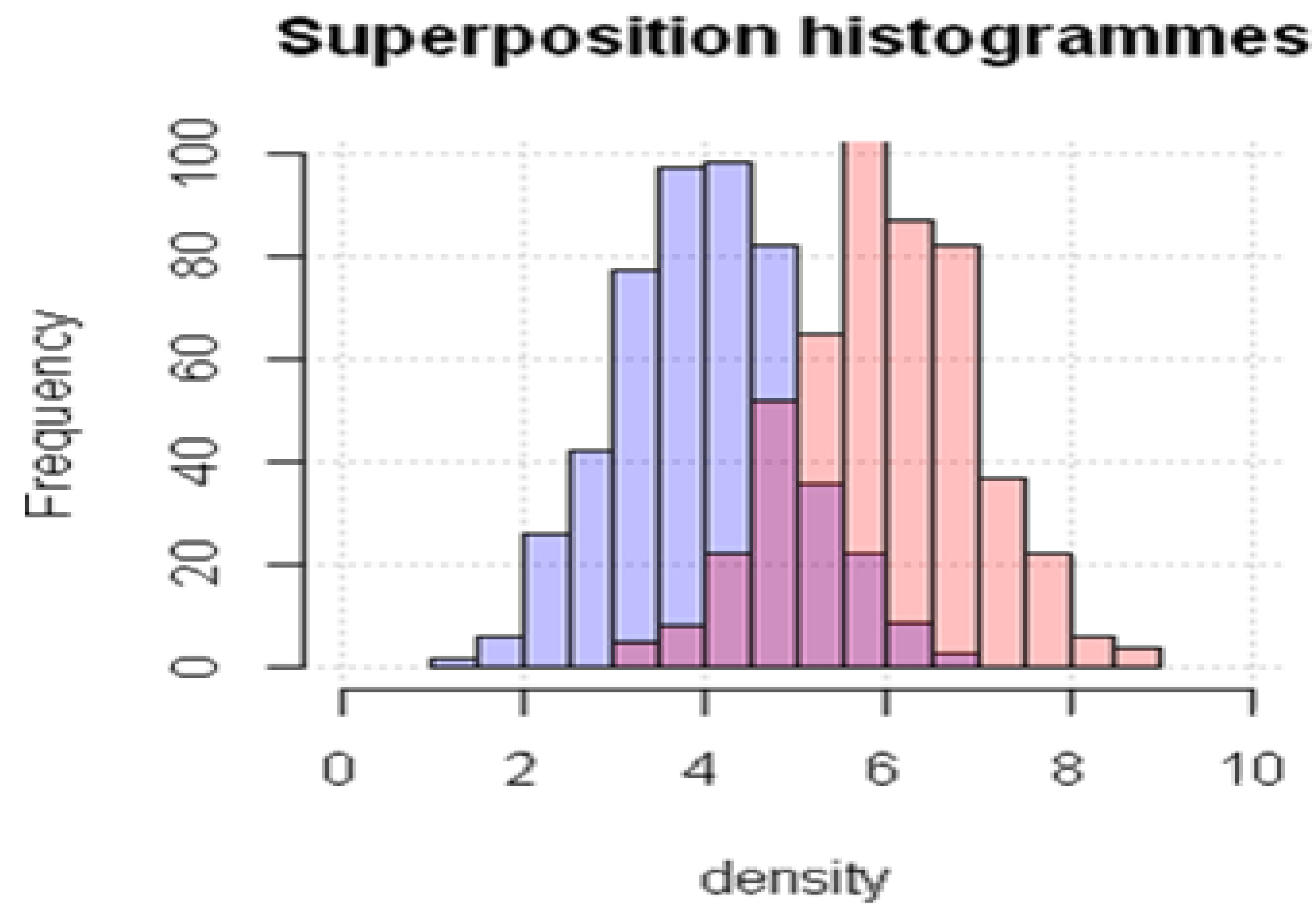
# Upset chart



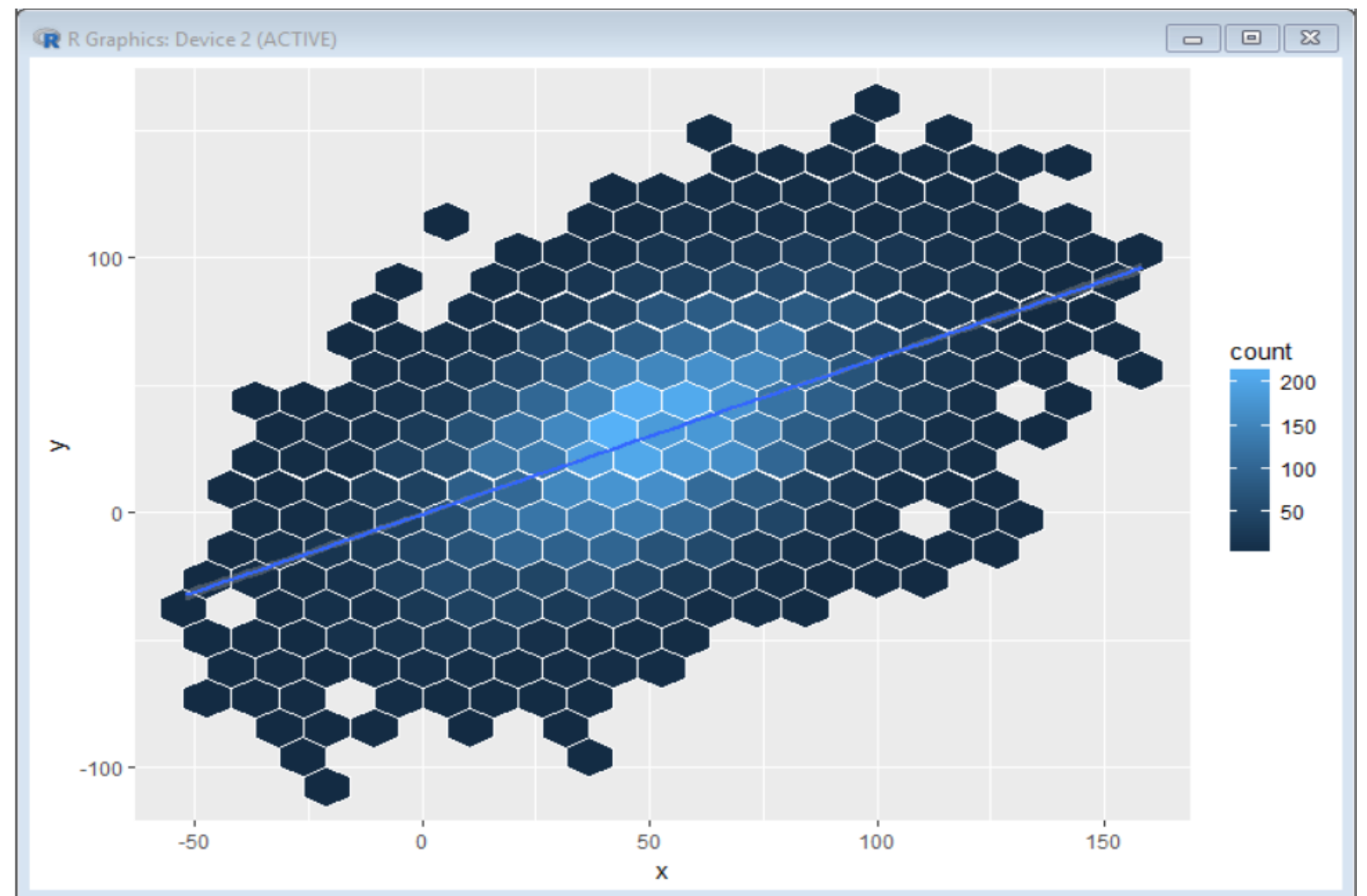
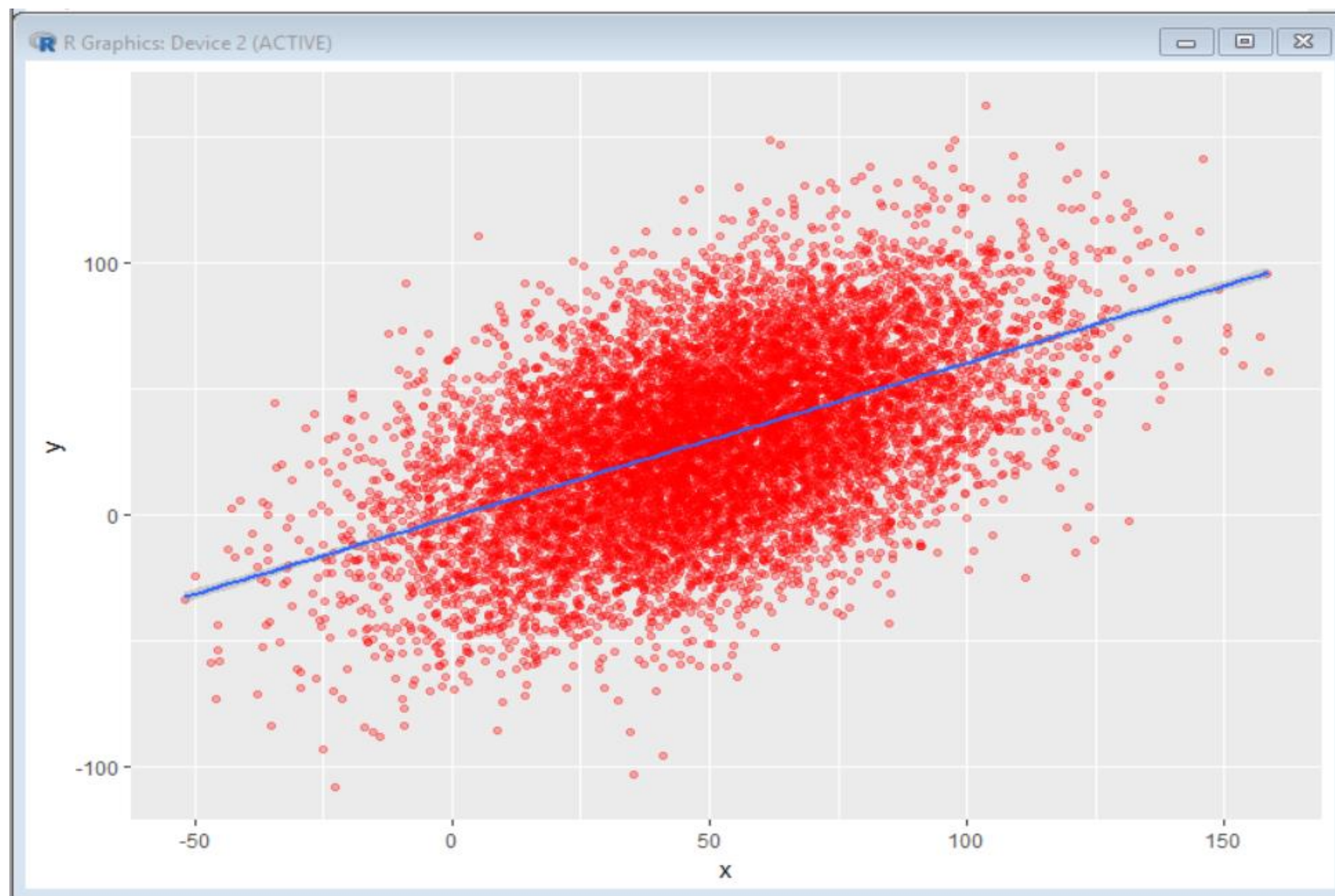
# Histograms



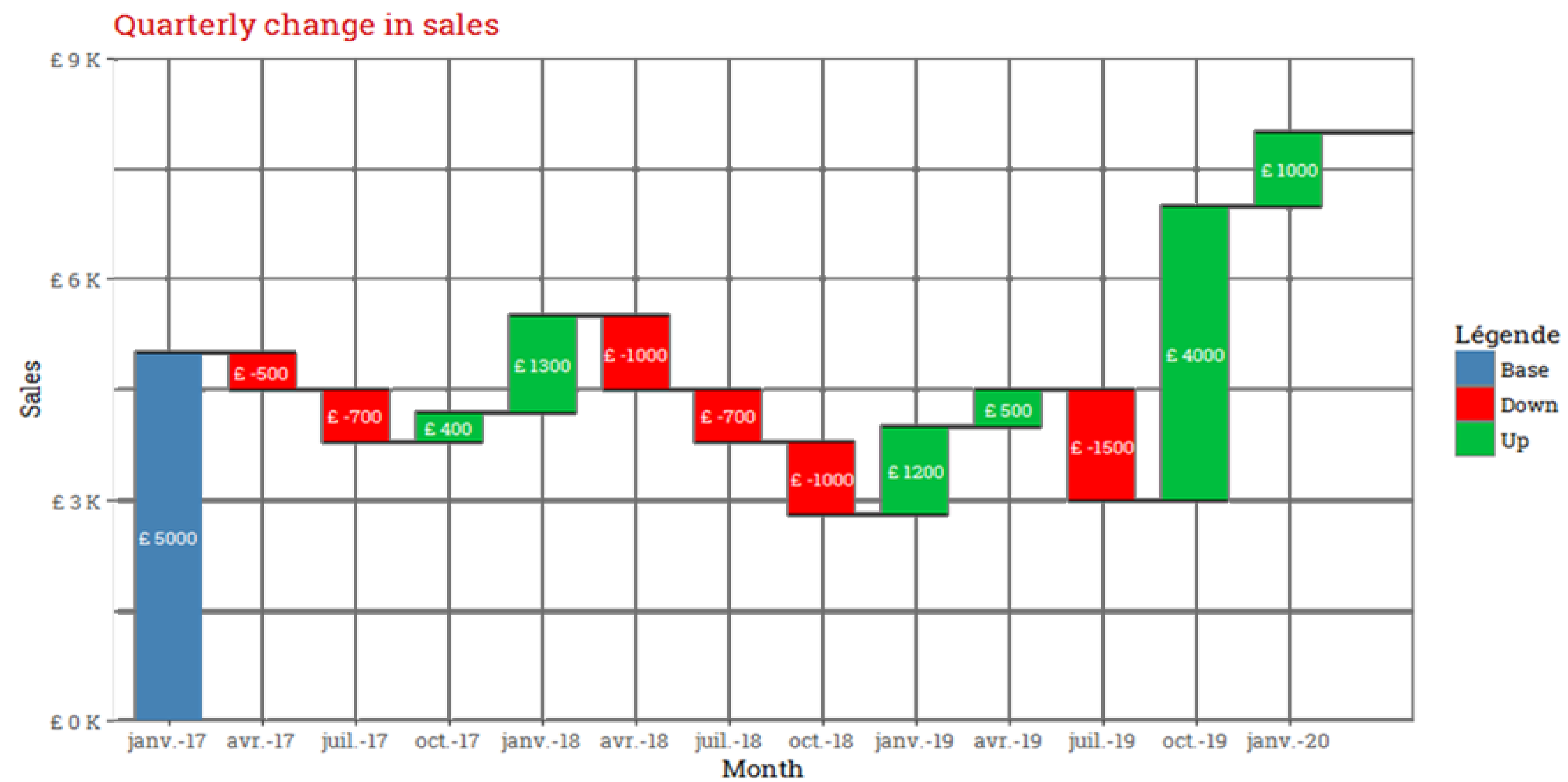
# Overlaid Histograms



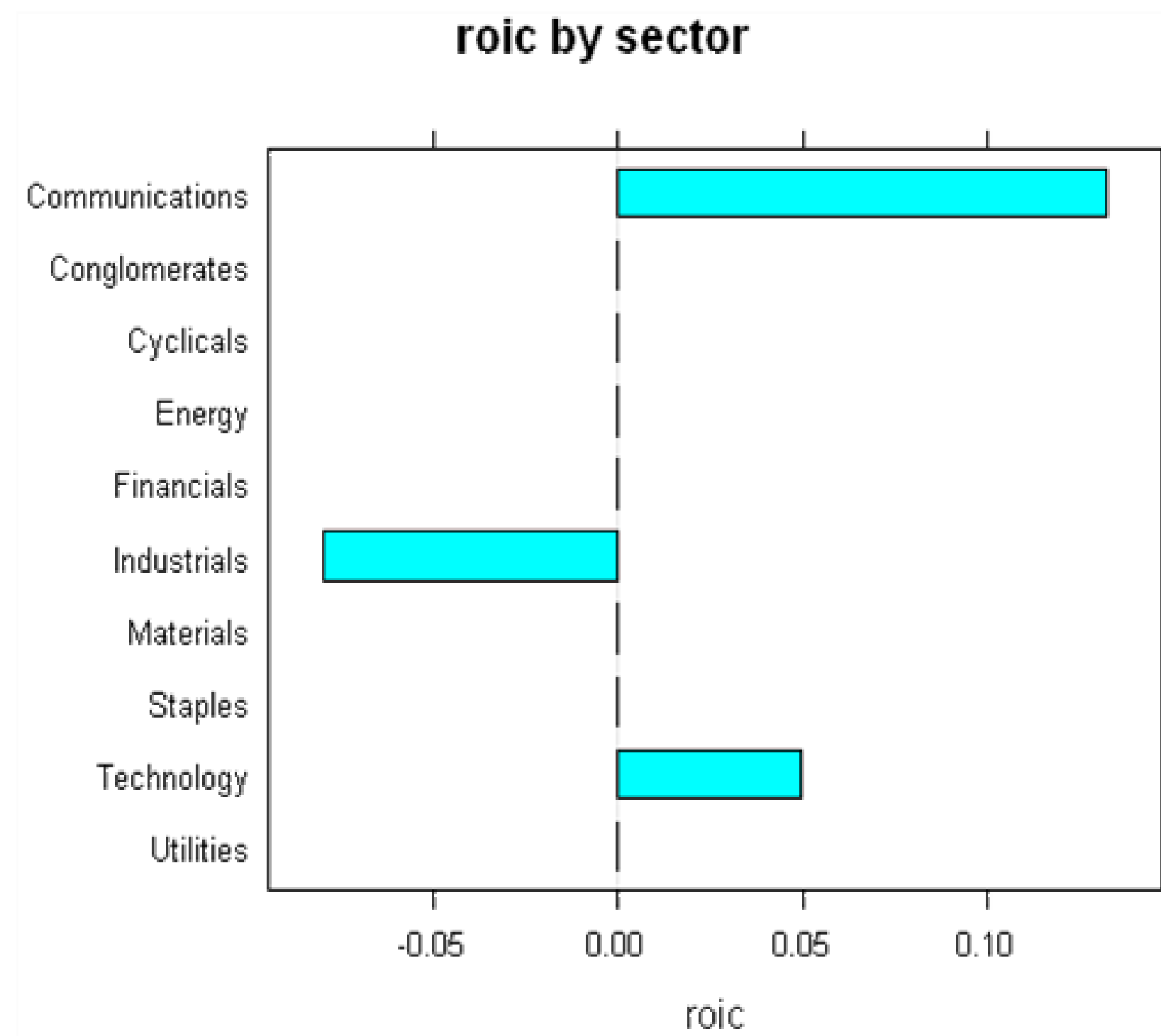
# Hexabins chart



# Cascade chart (Waterfall chart)

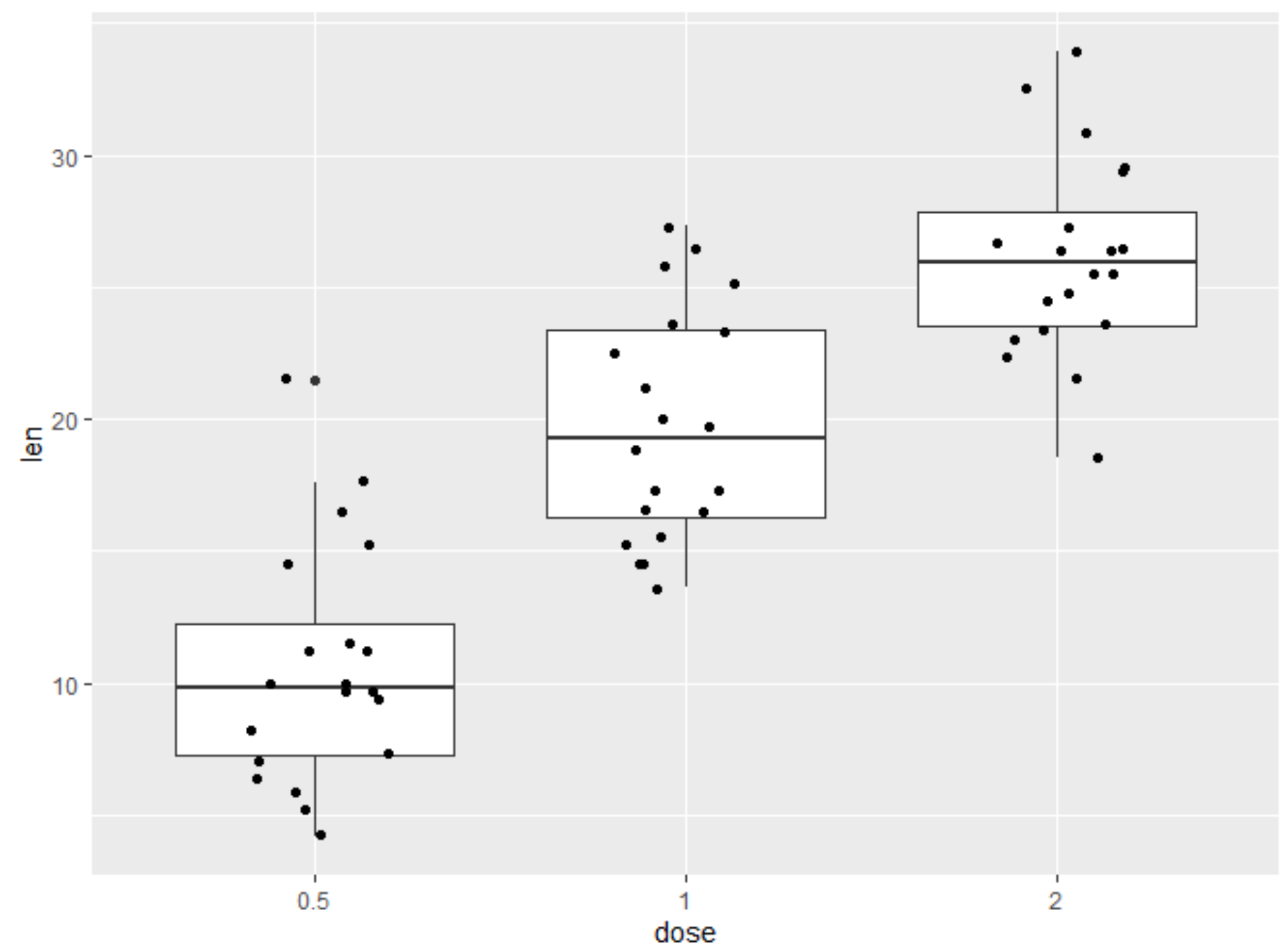
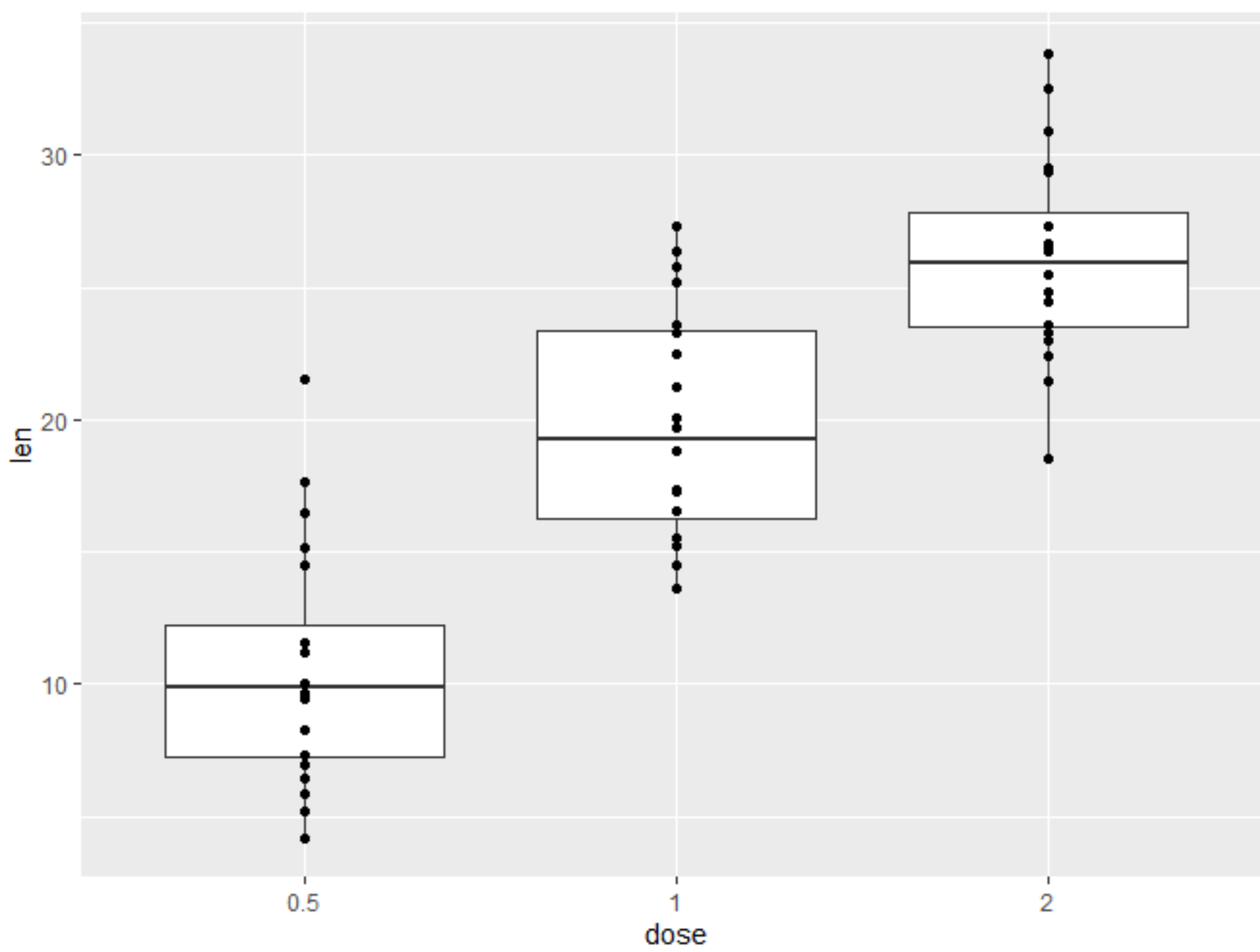


# Tornado chart

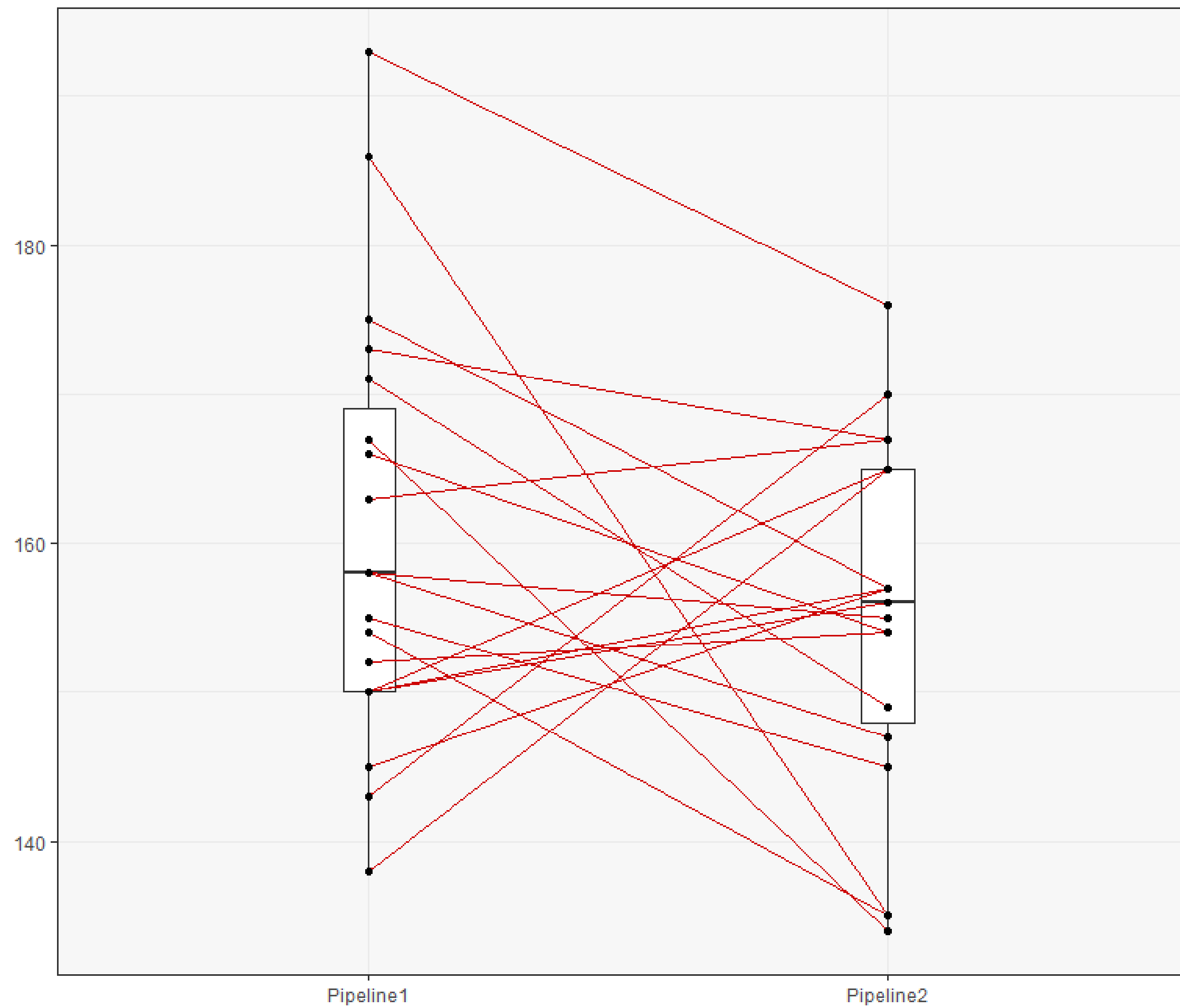




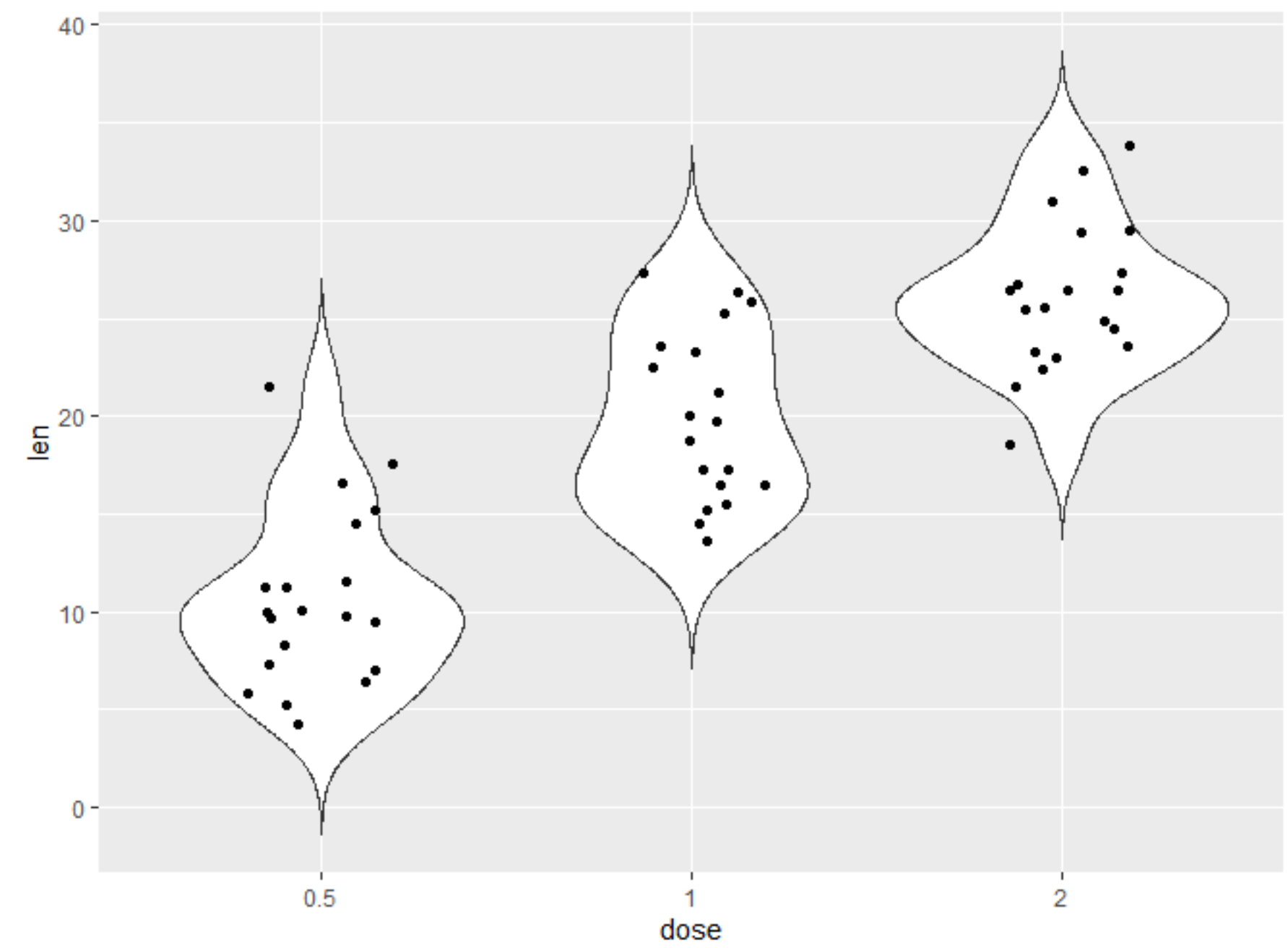
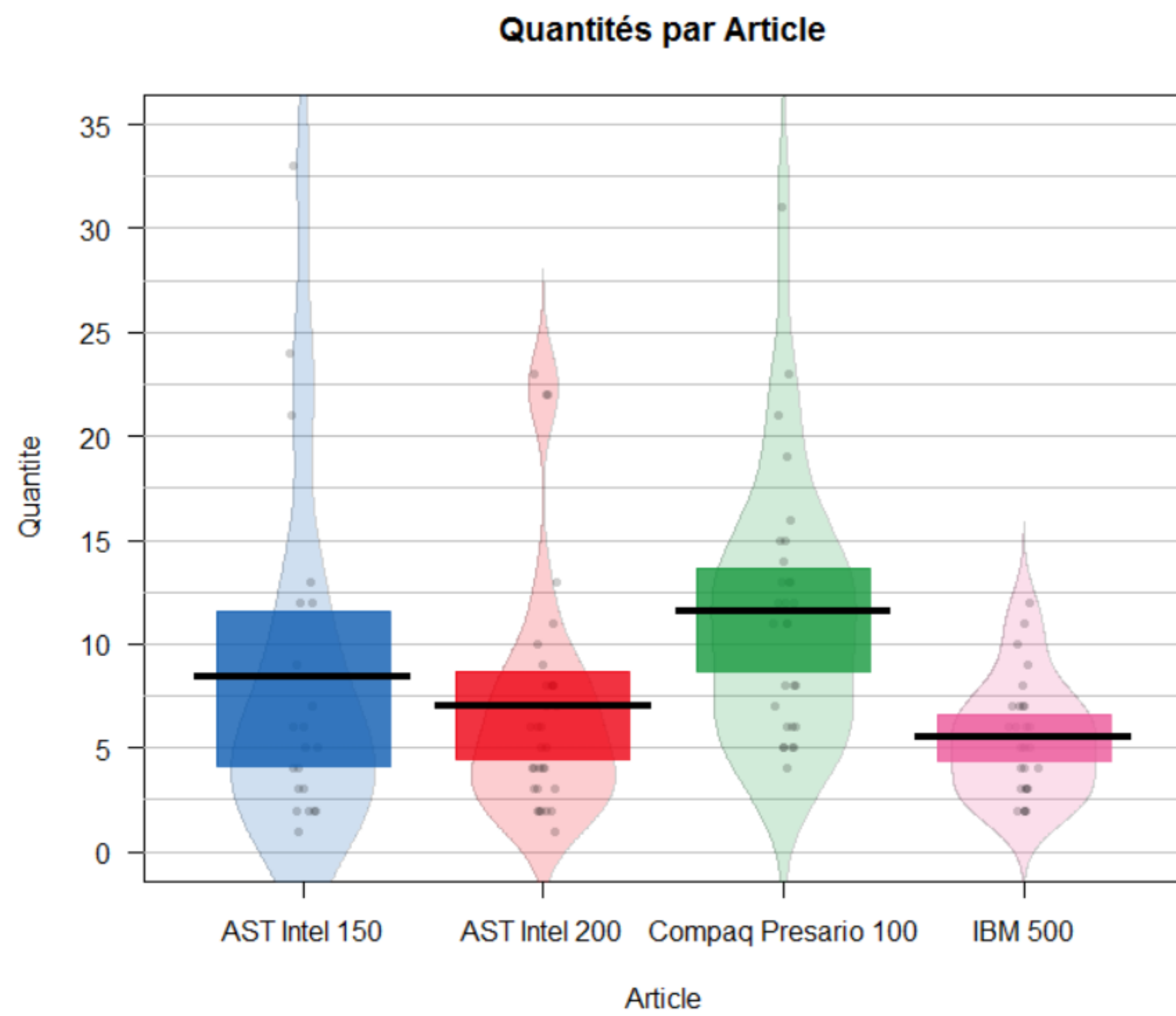
# Box & Whiskers charts



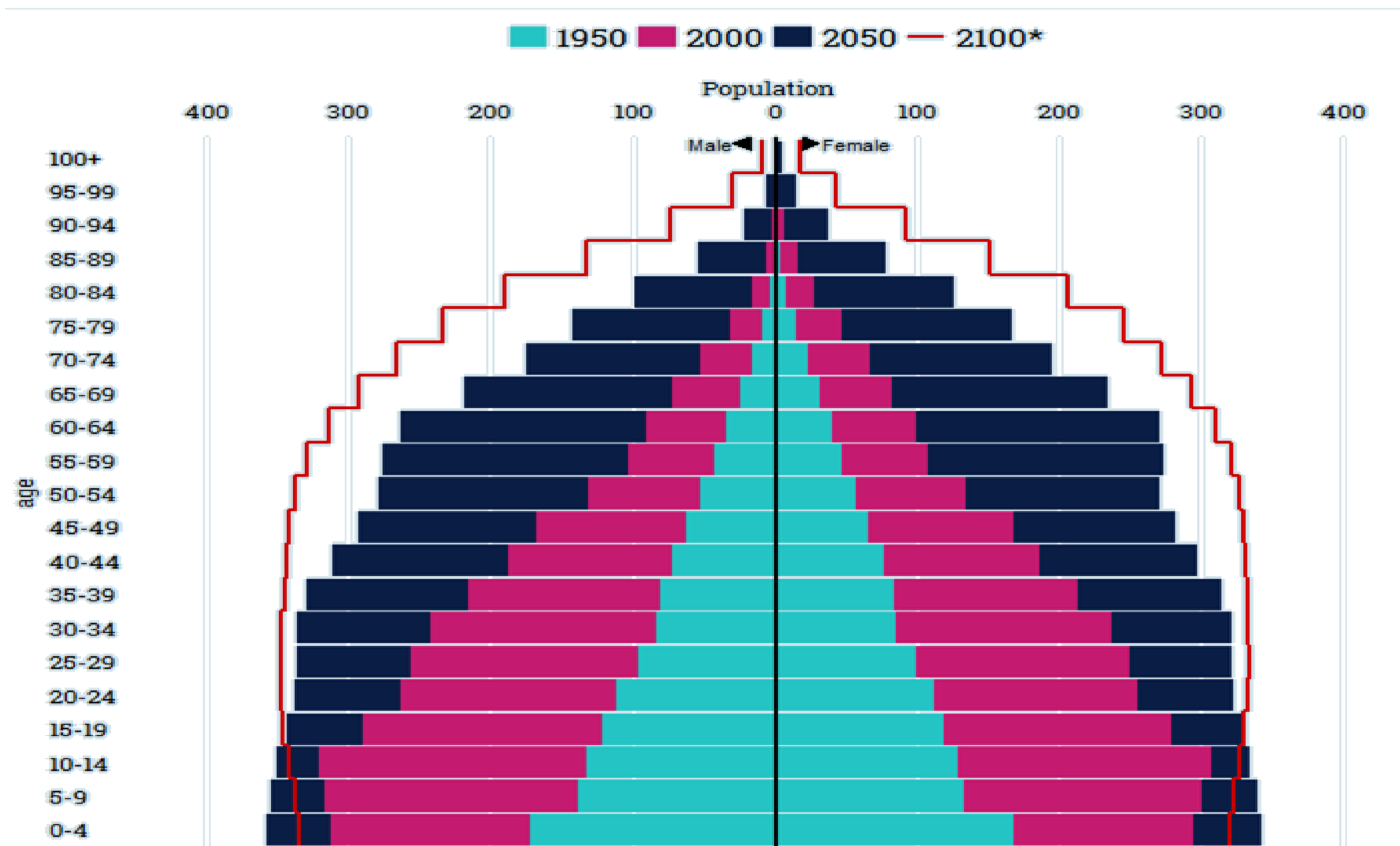
## Box & Whiskers paired charts



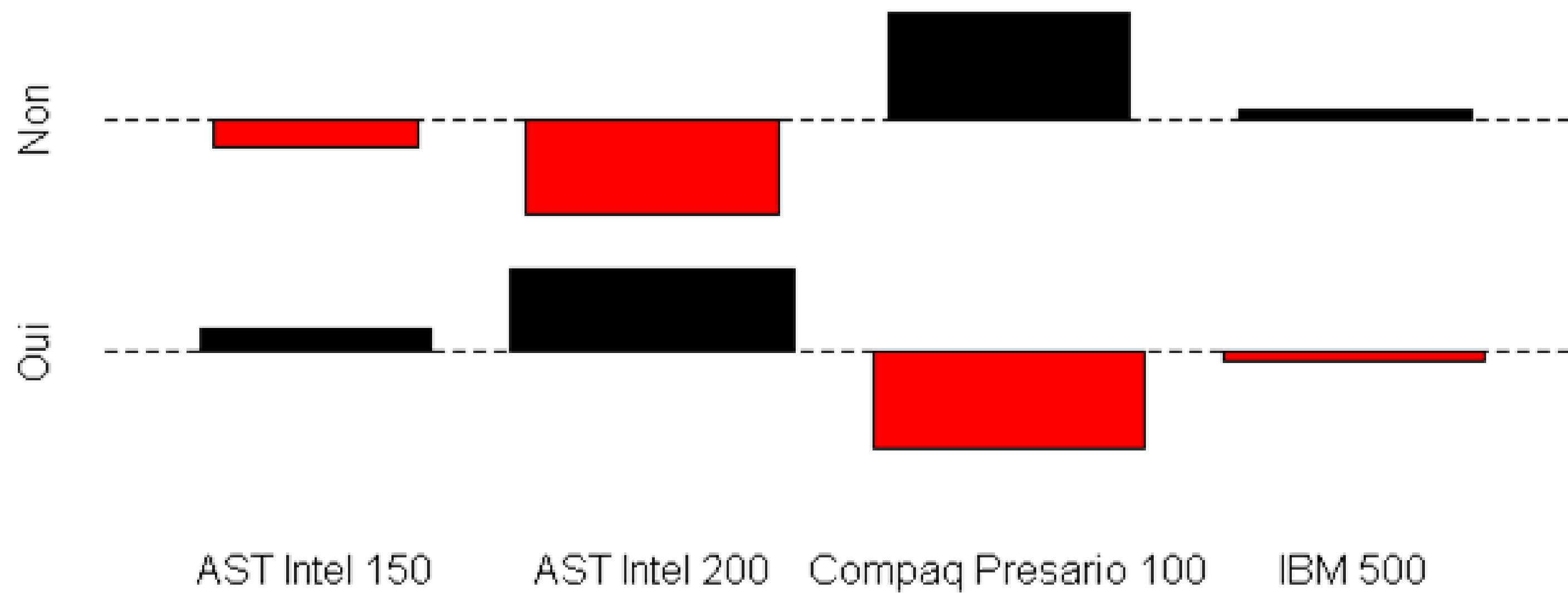
# Violin chart



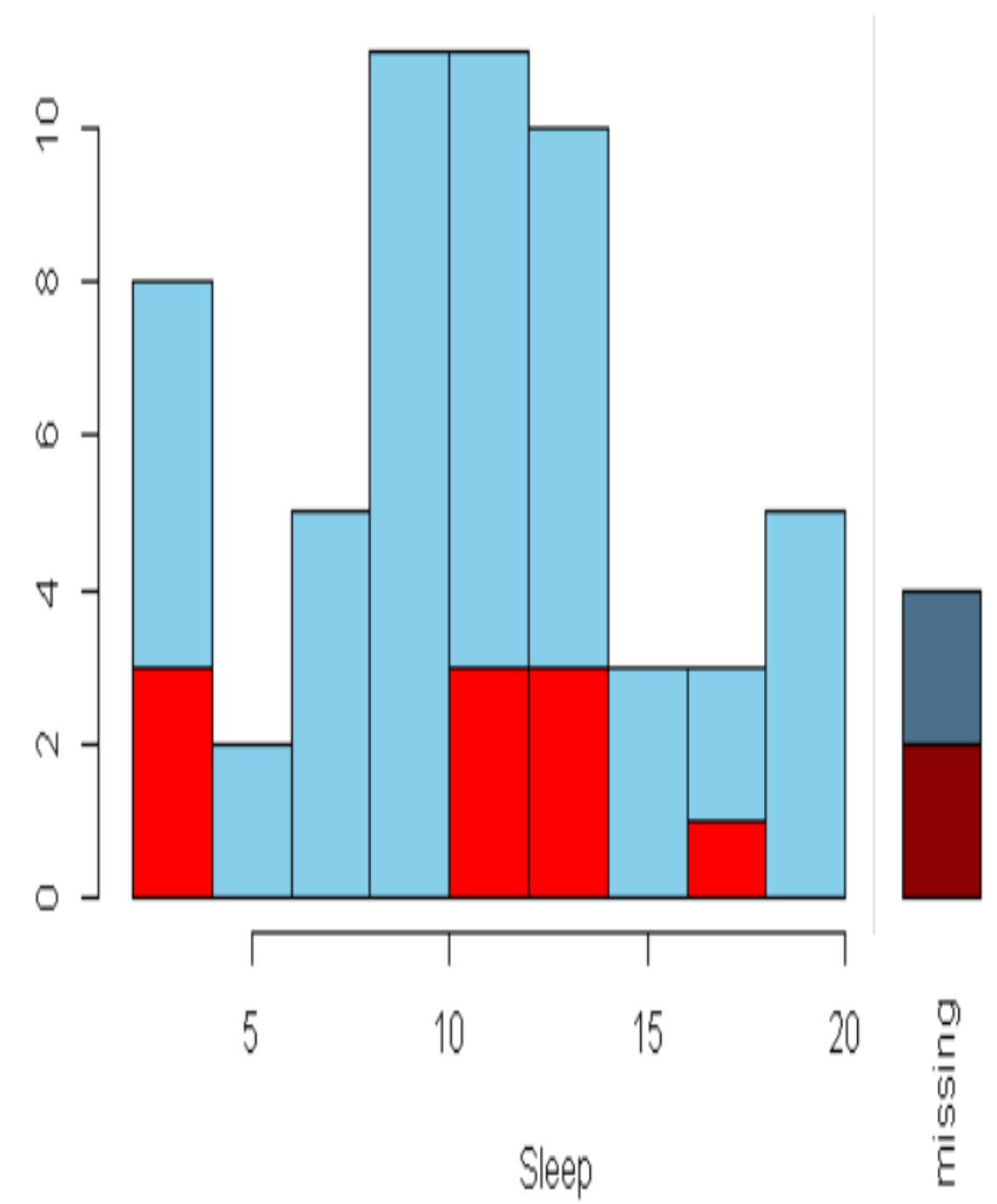
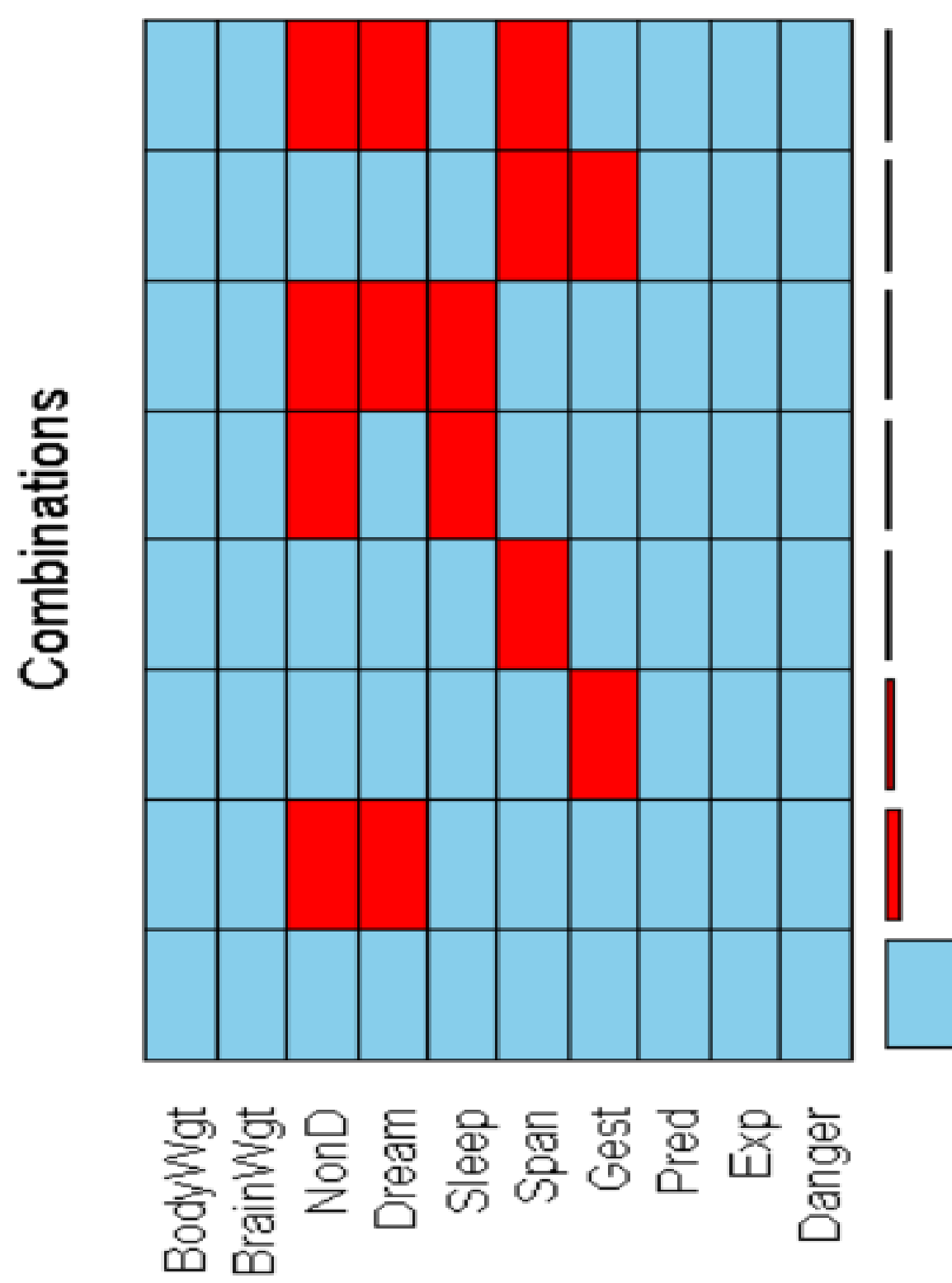
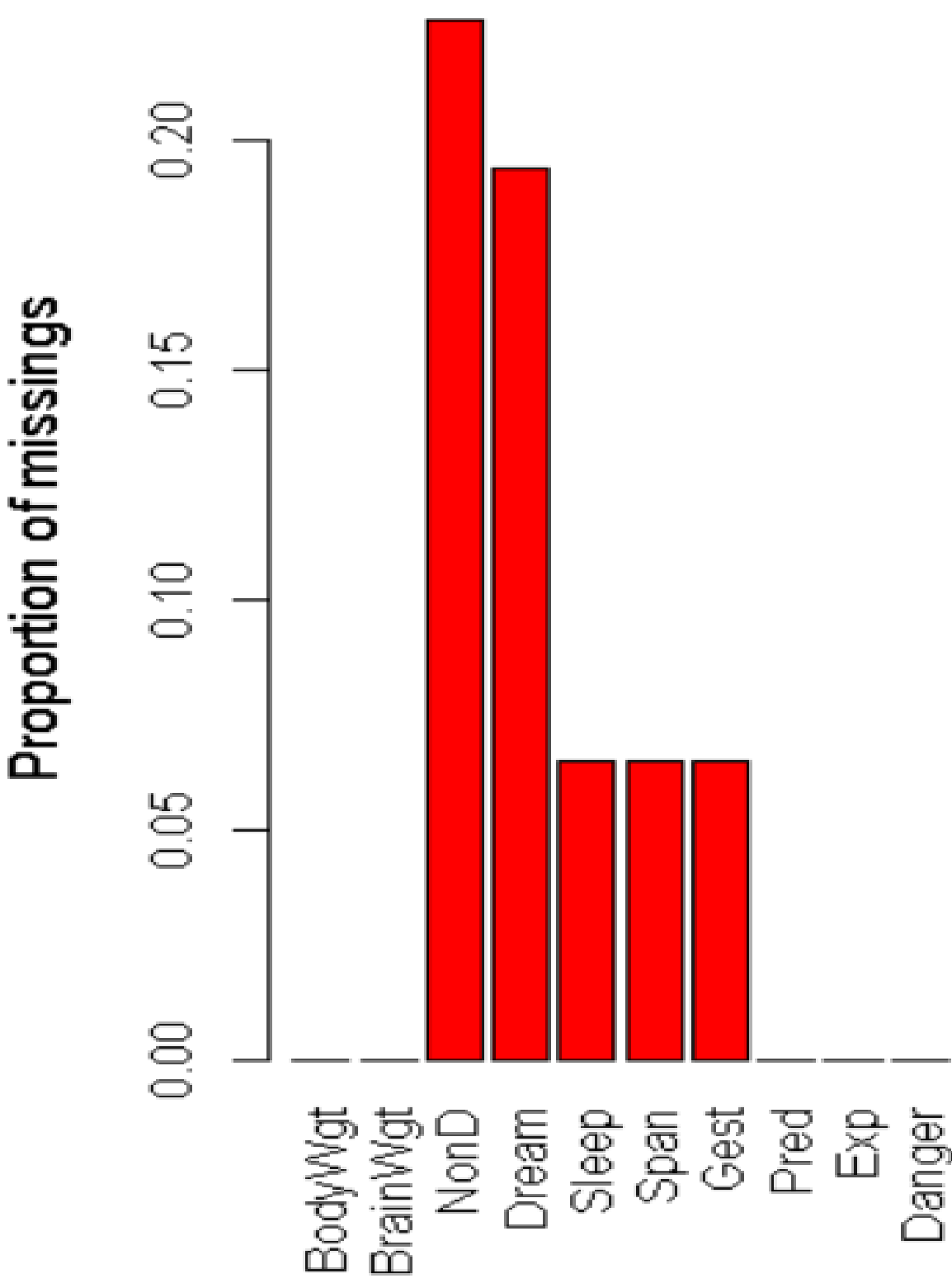
# Pyramide chart



## Association chart

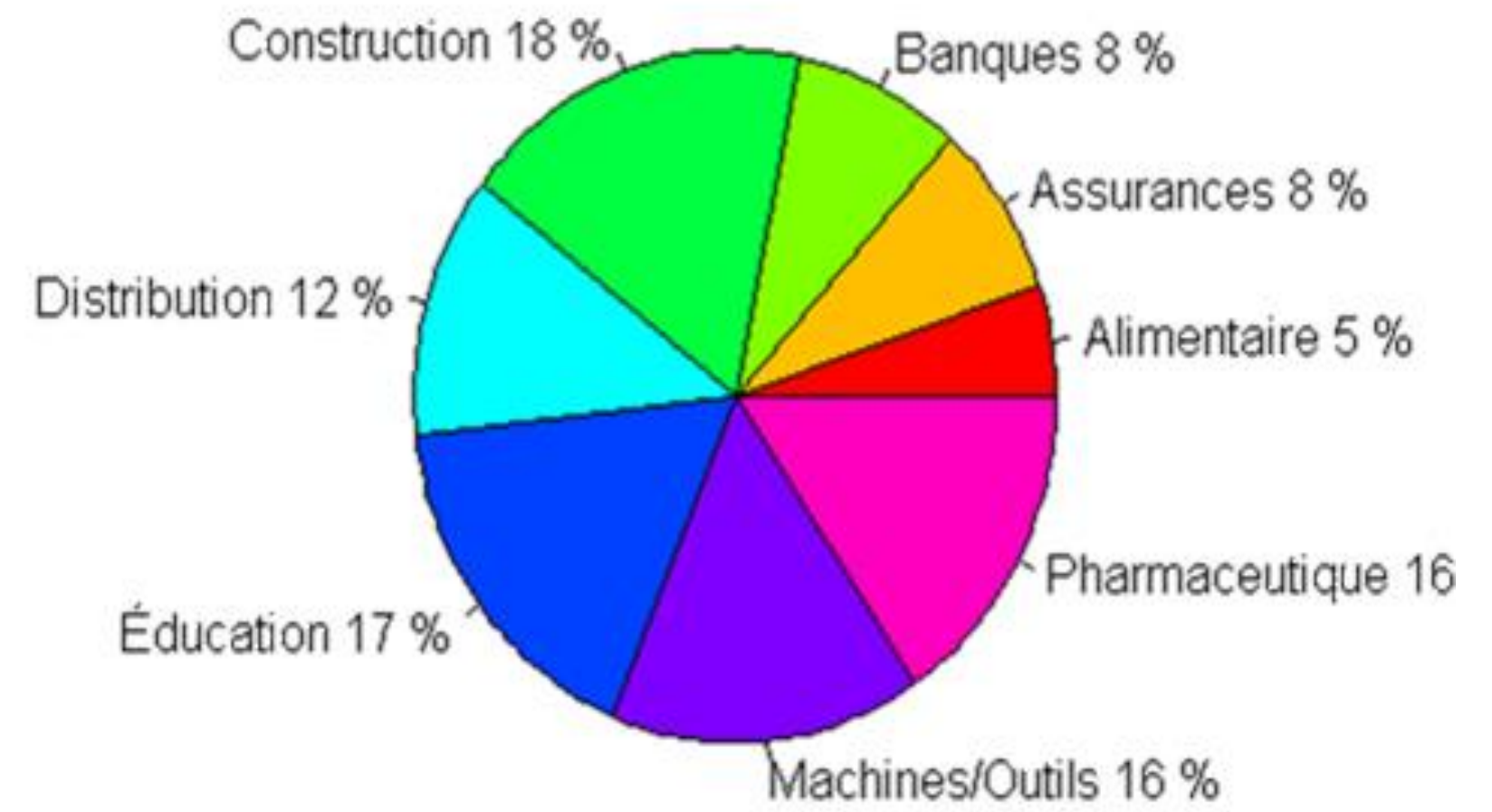
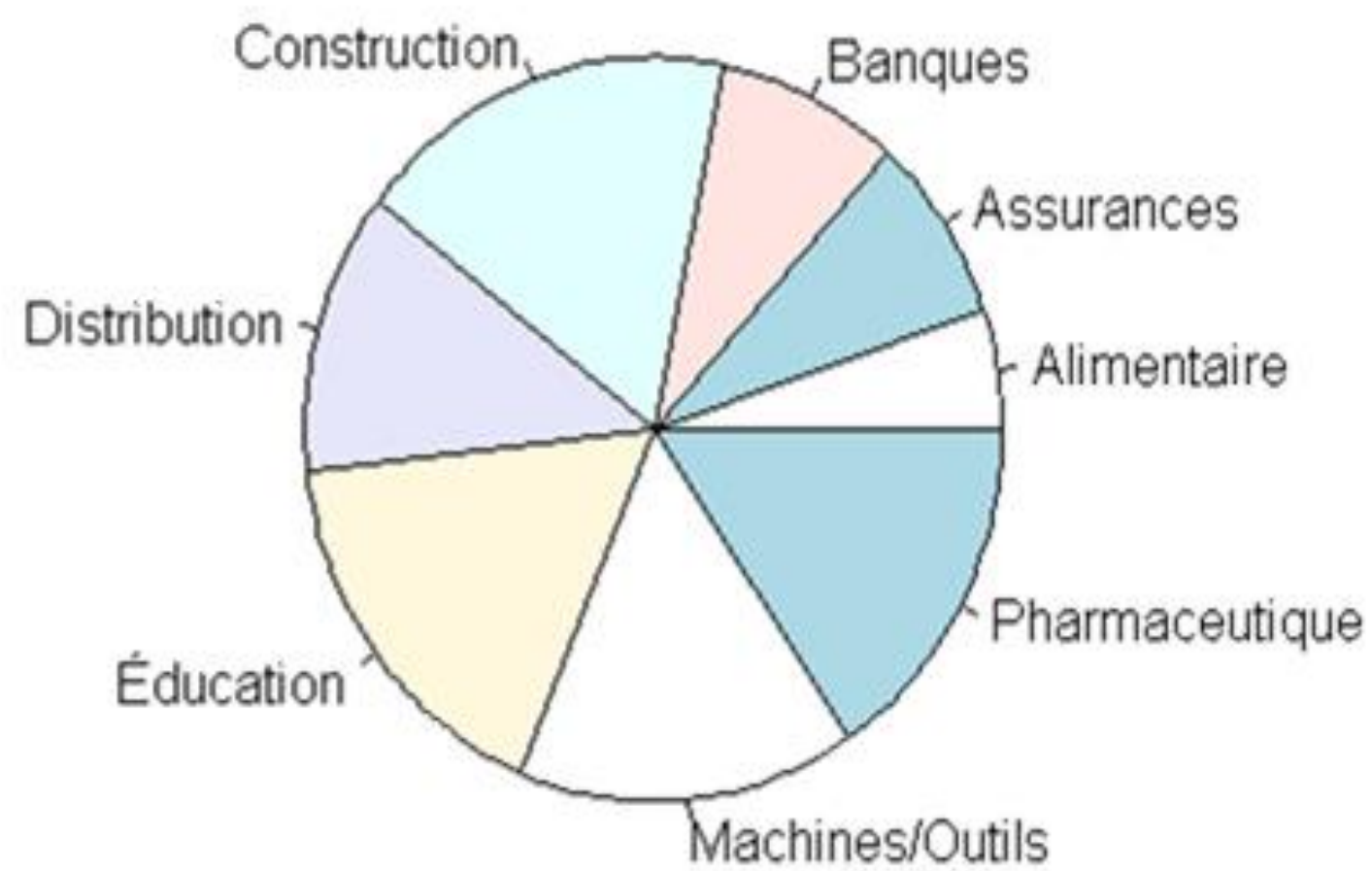


# Missing values charts



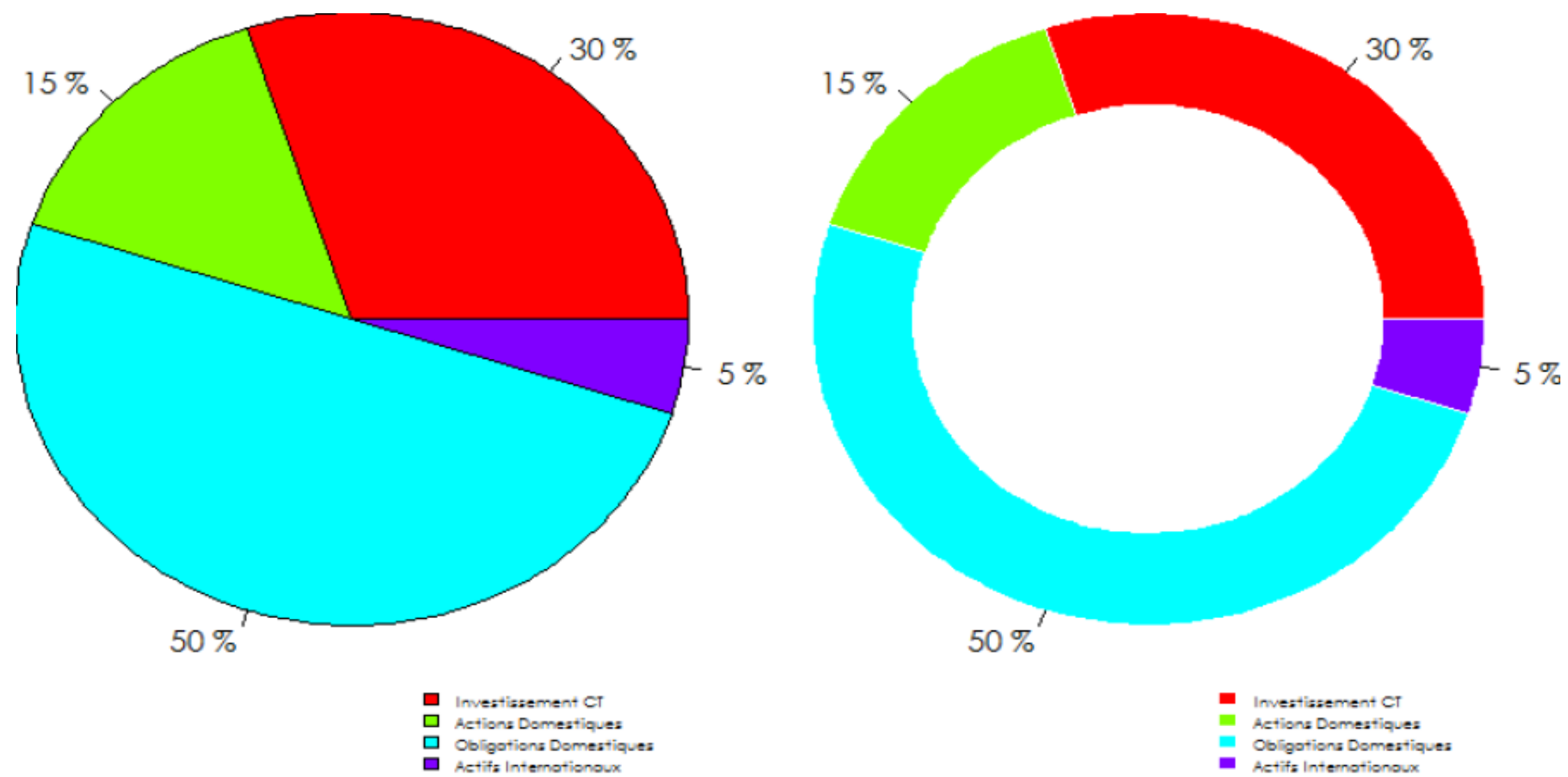
# Polar Charts

## Sector charts



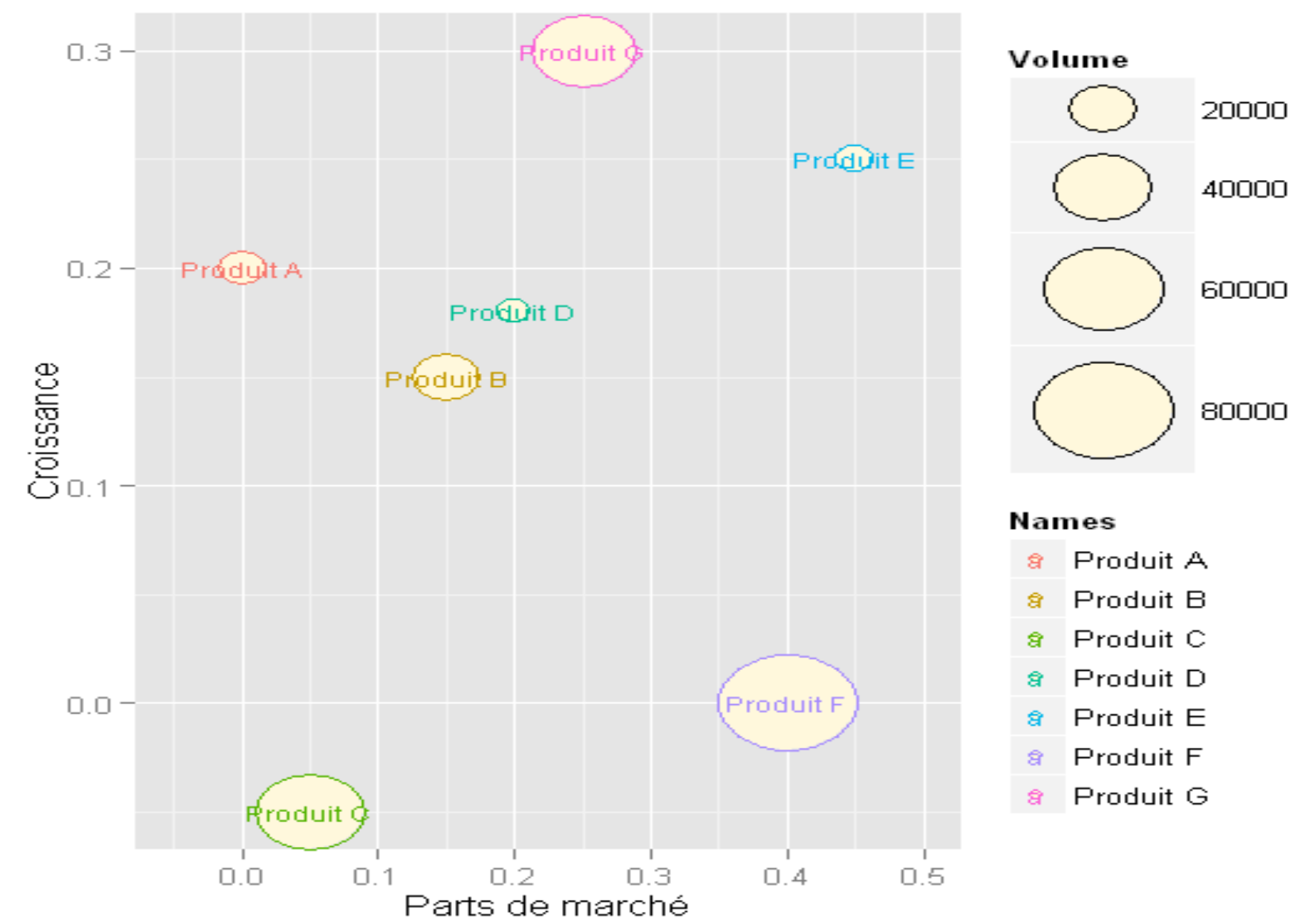
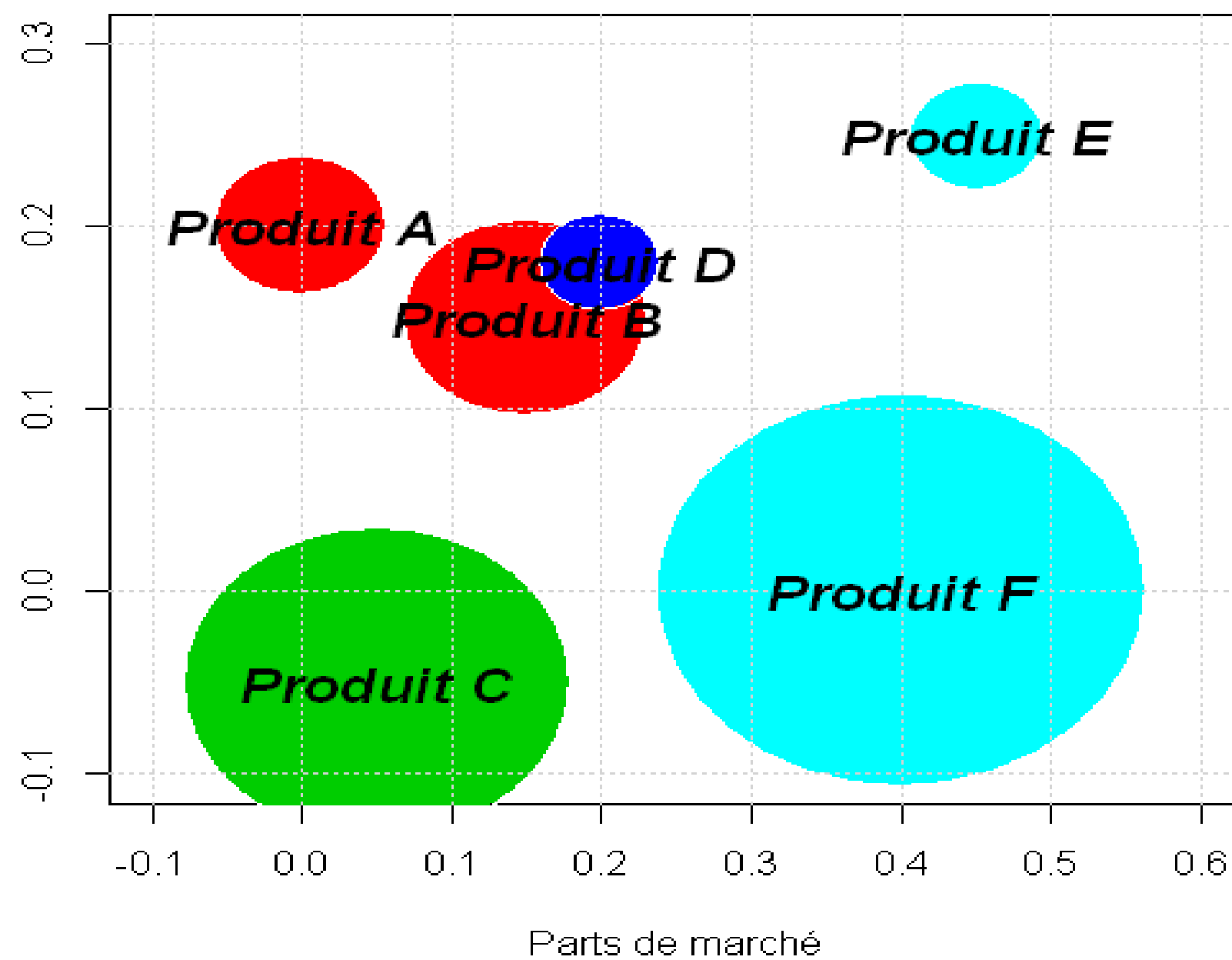


# Donuts charts

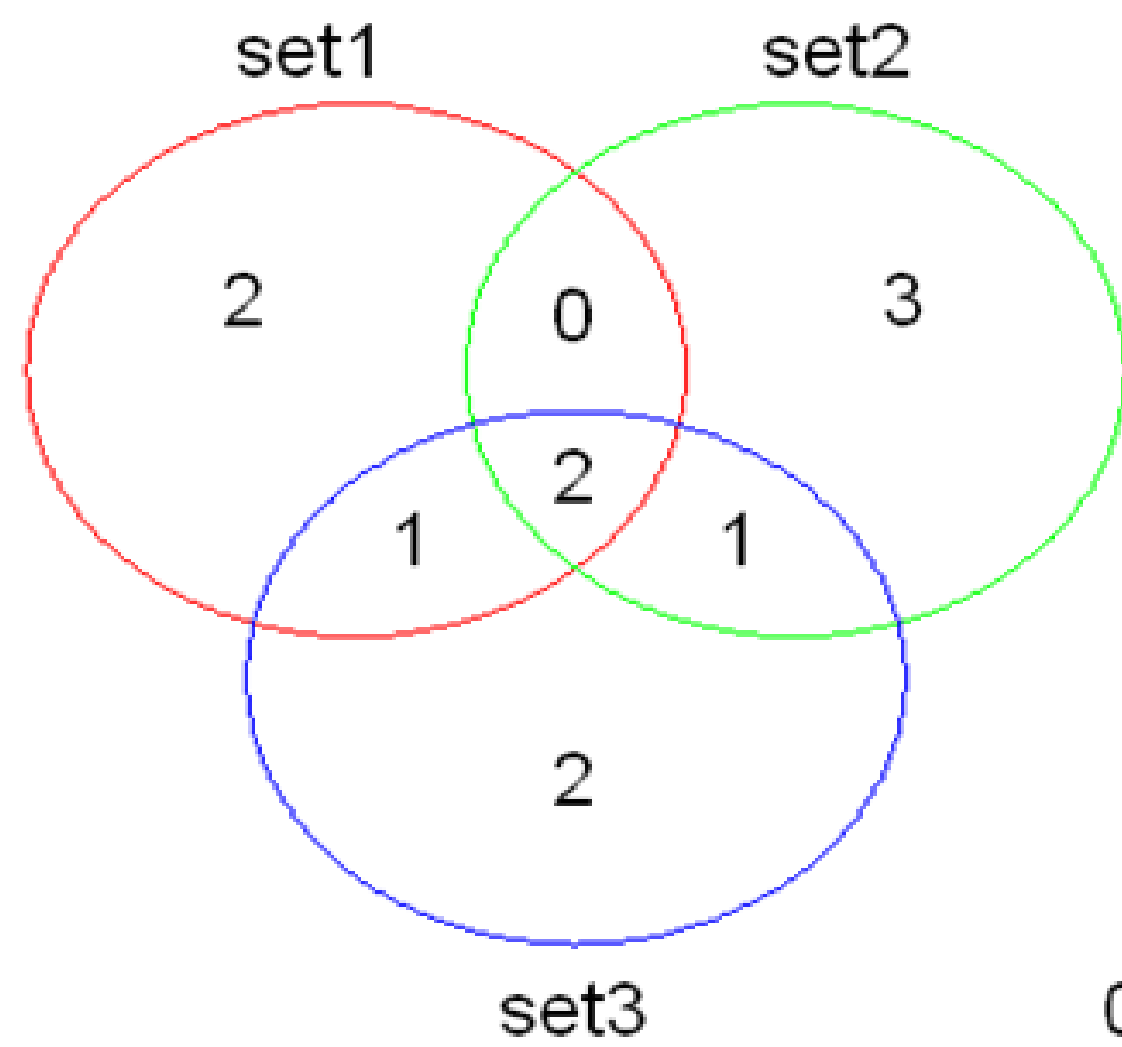


# Bubble charts

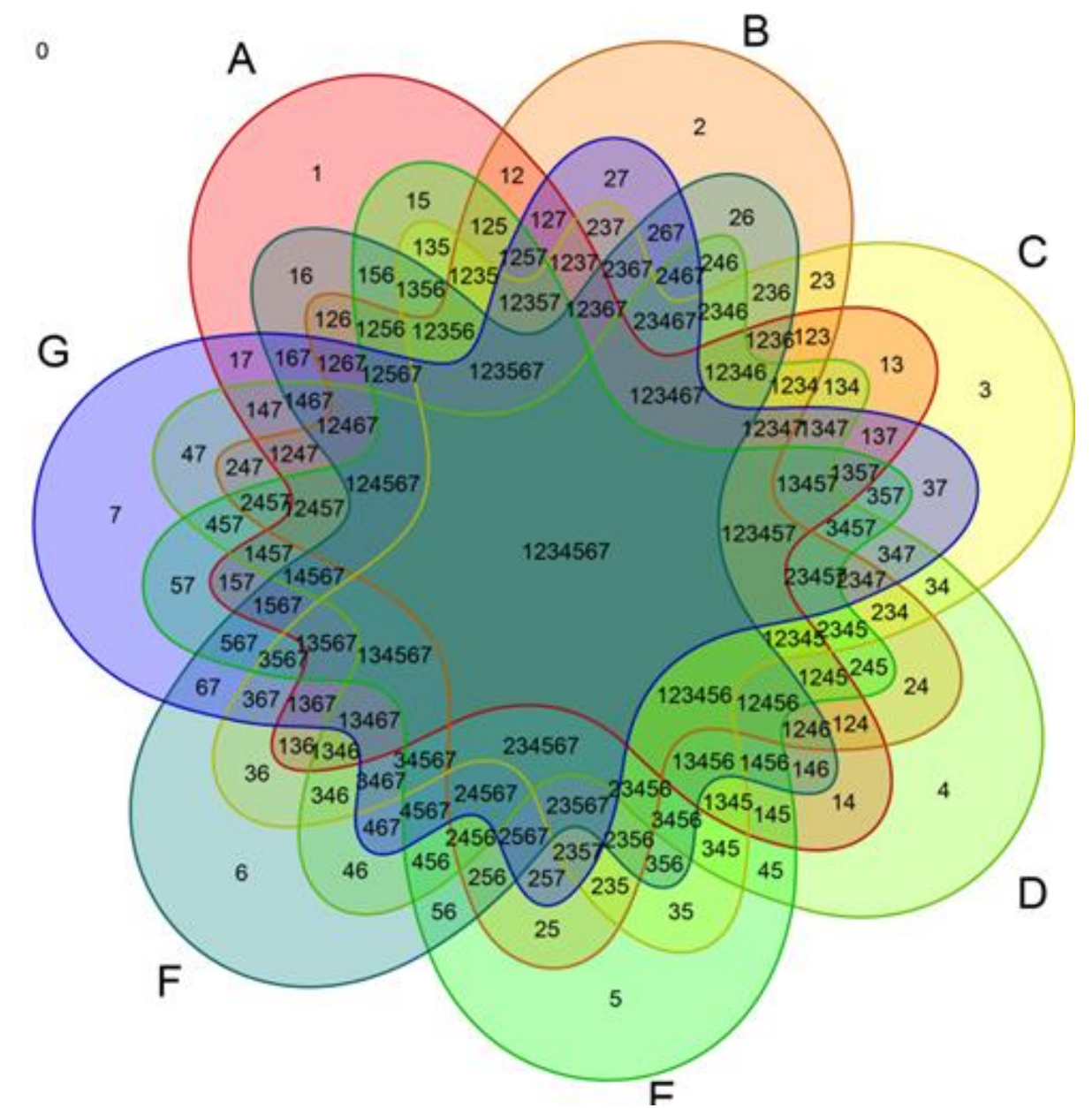
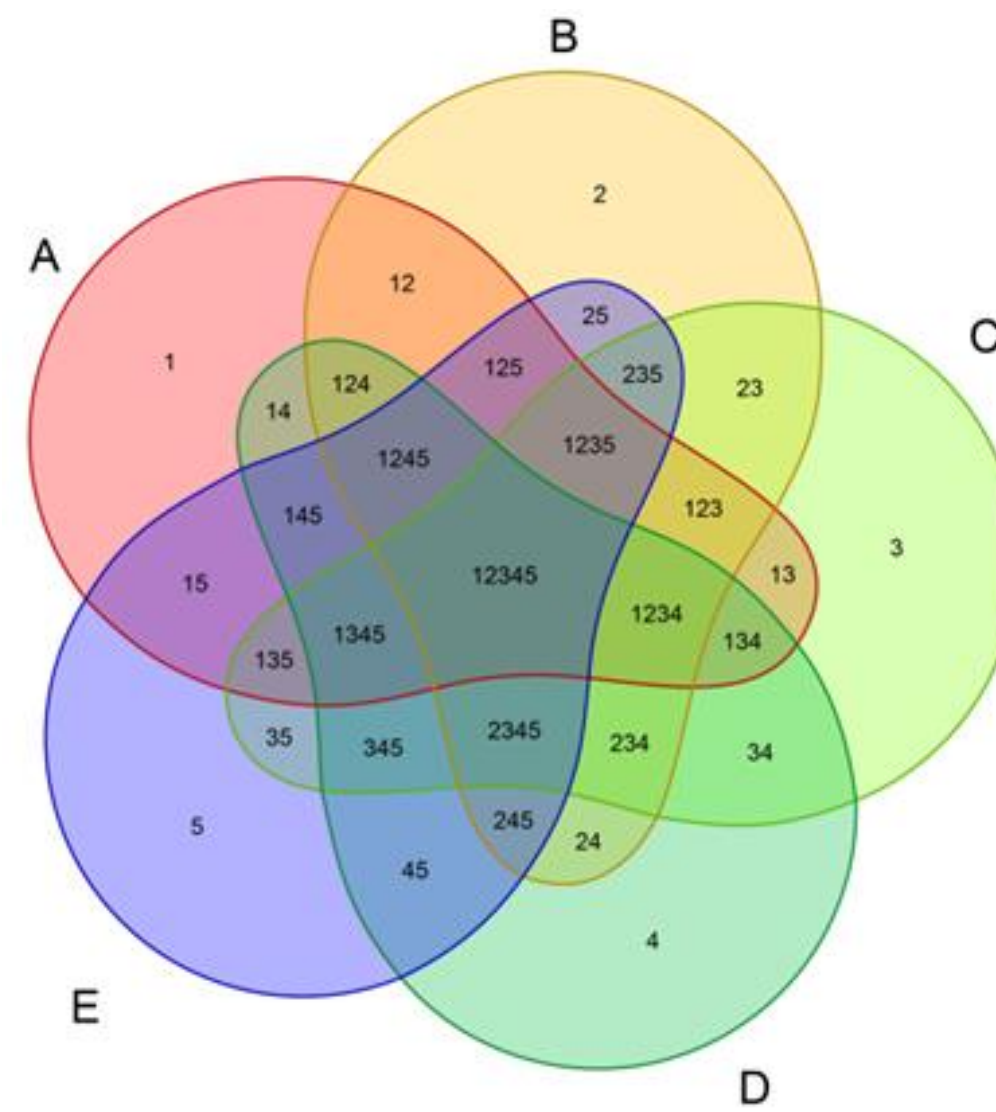
Diagramme à bulle



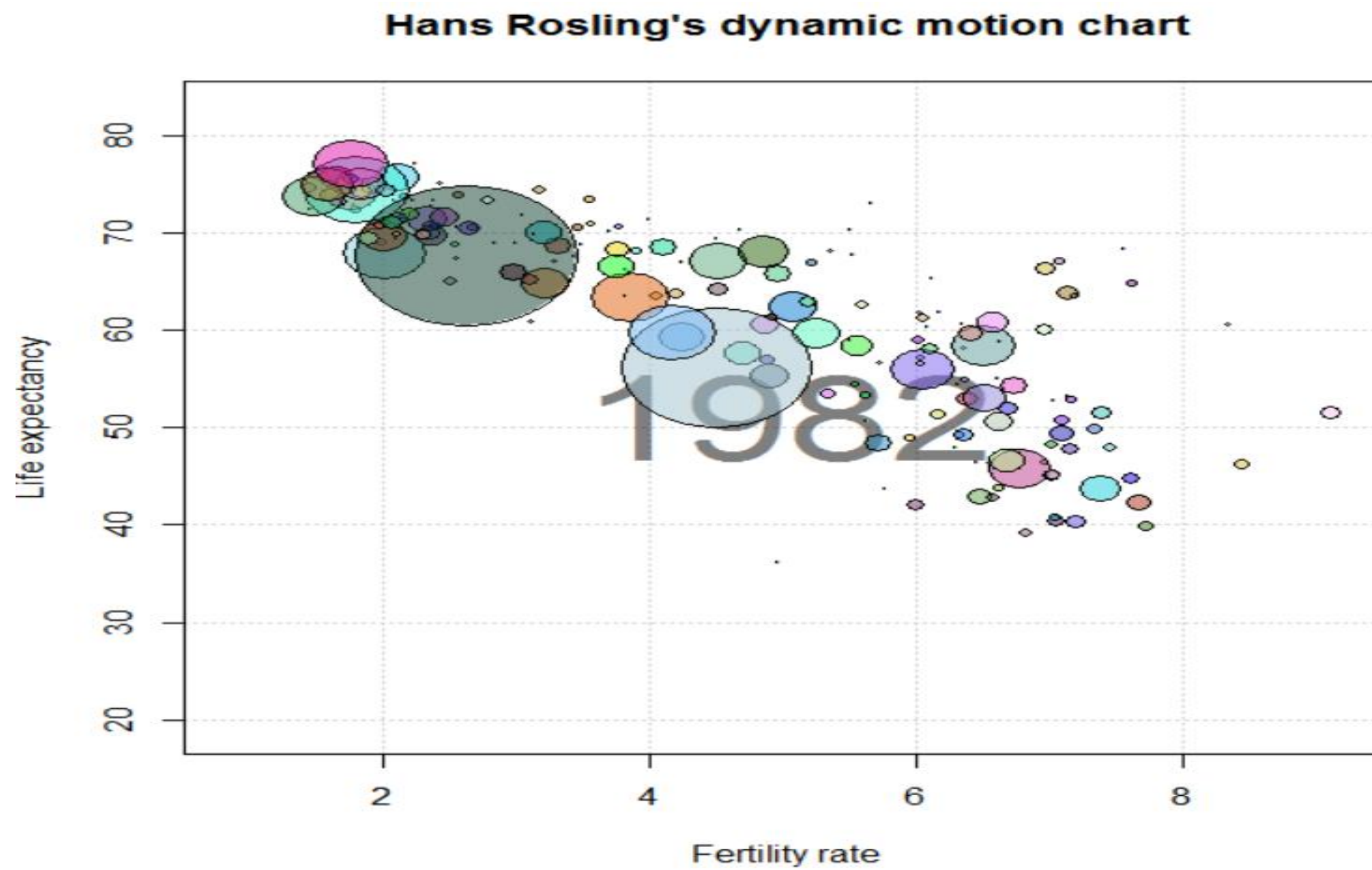
# Venn charts



0

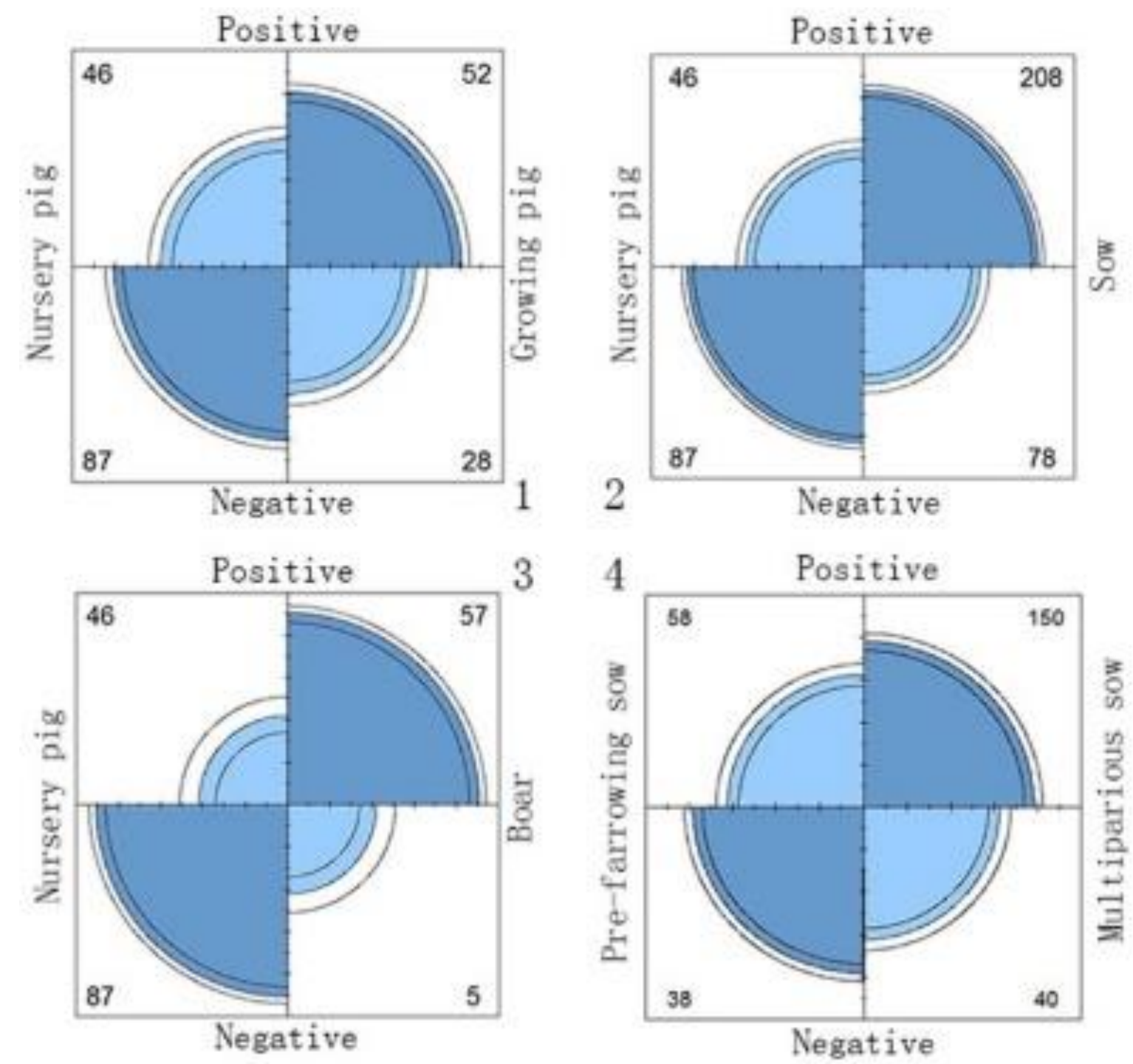


## Rosling chart (animated bubbles)

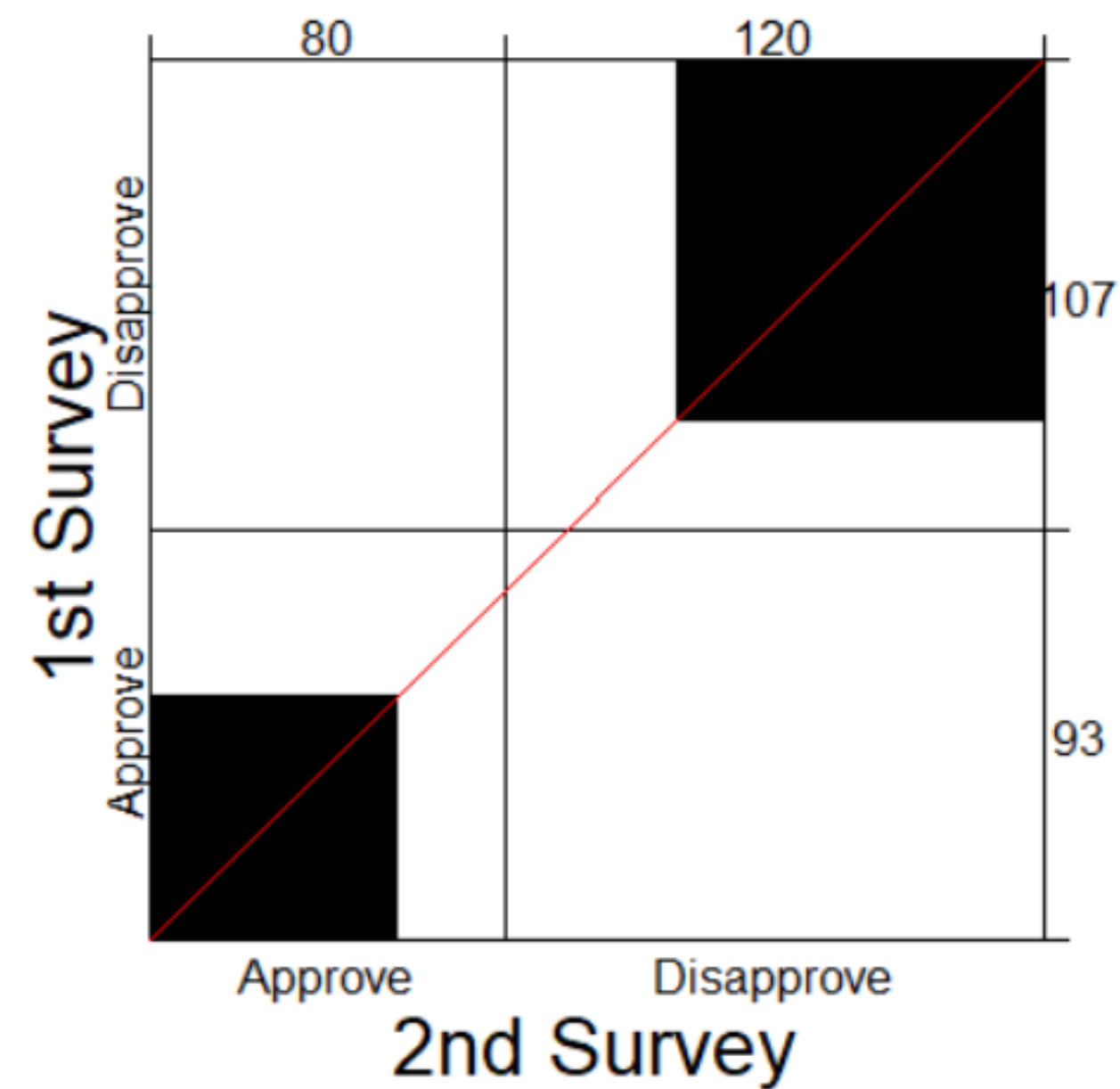




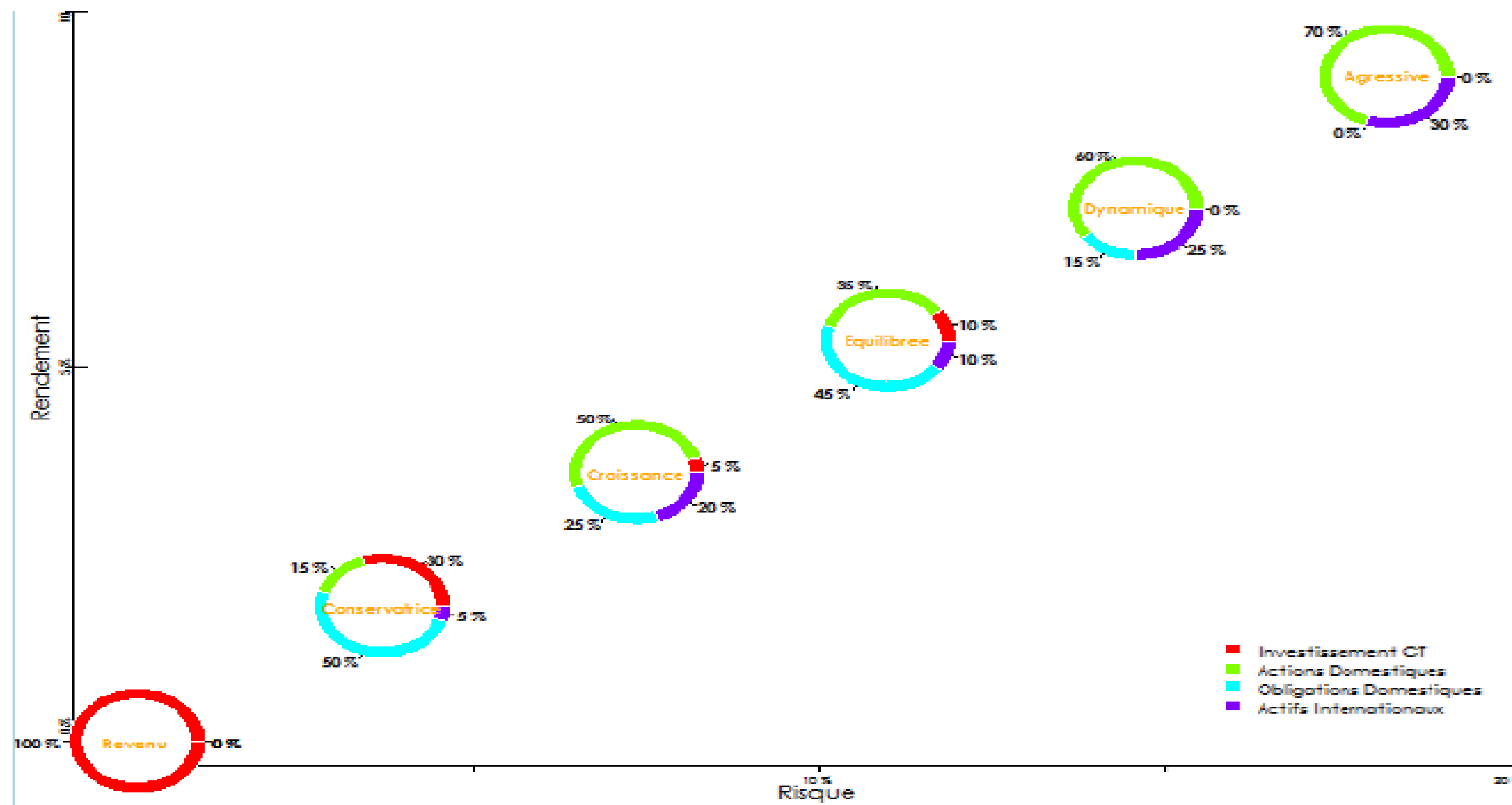
# Fourfold charts



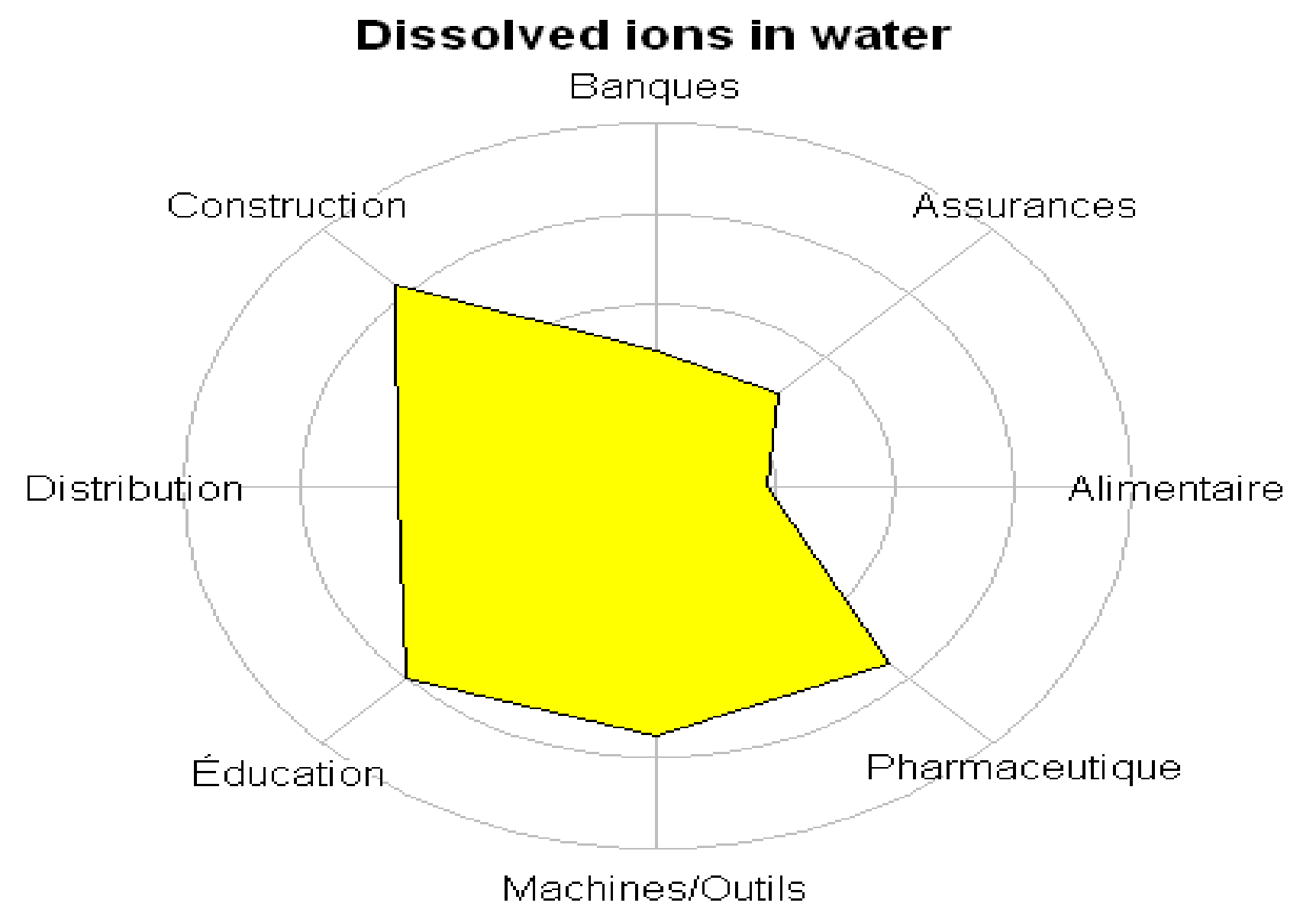
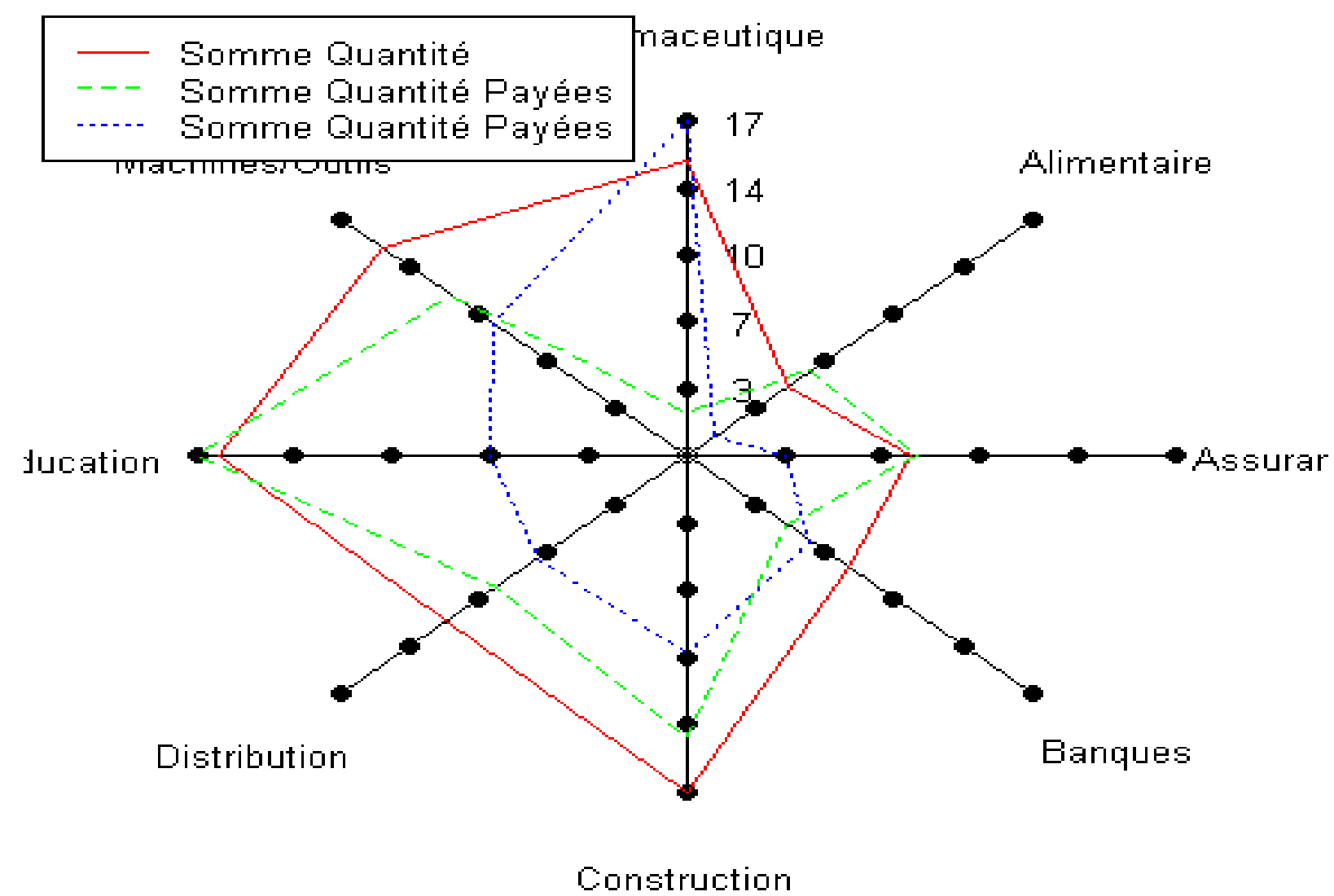
## Agreement chart (Bangdiwala's Observer Agreement Chart)



# Dynamics sector chart

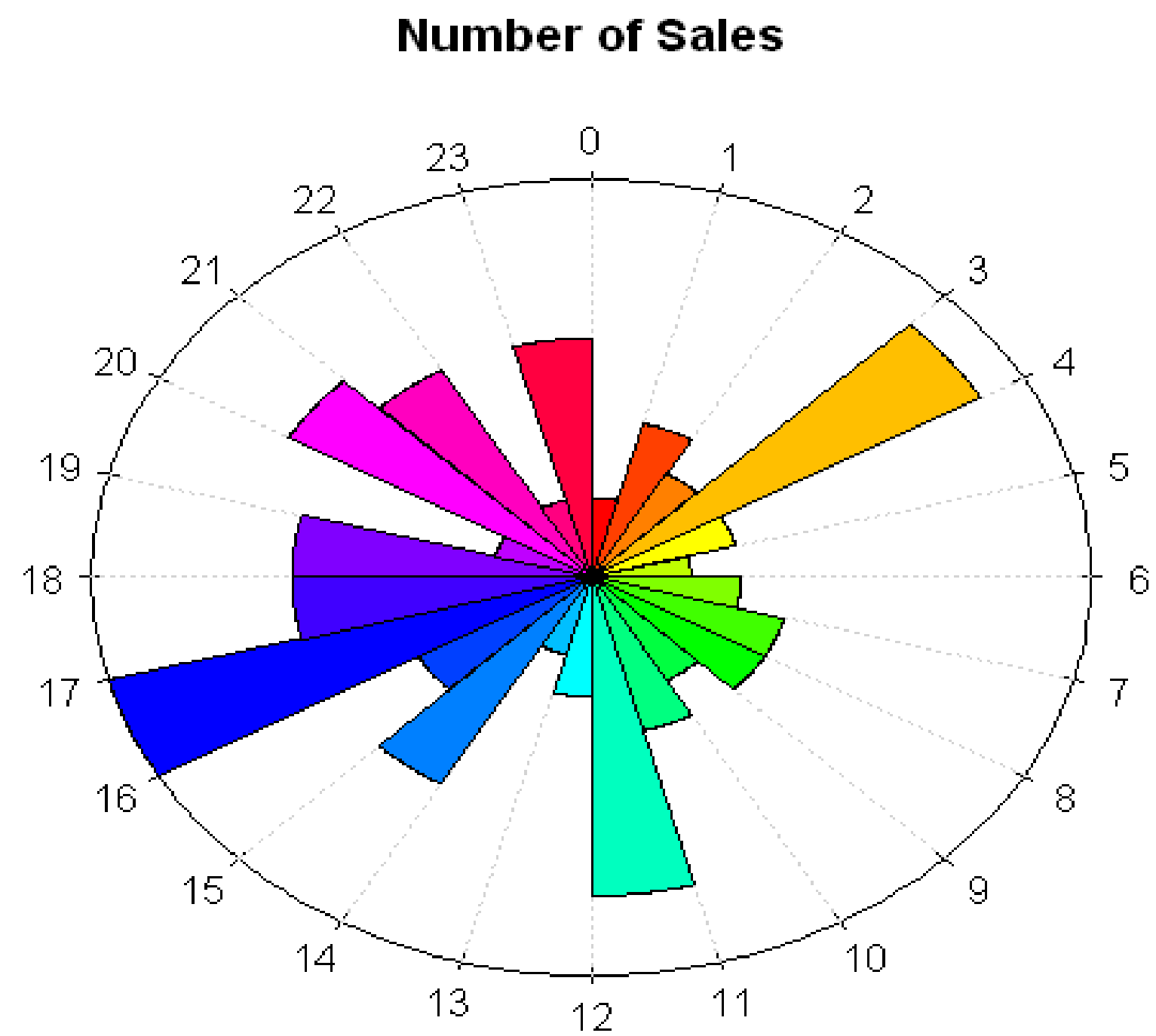


# Radar charts

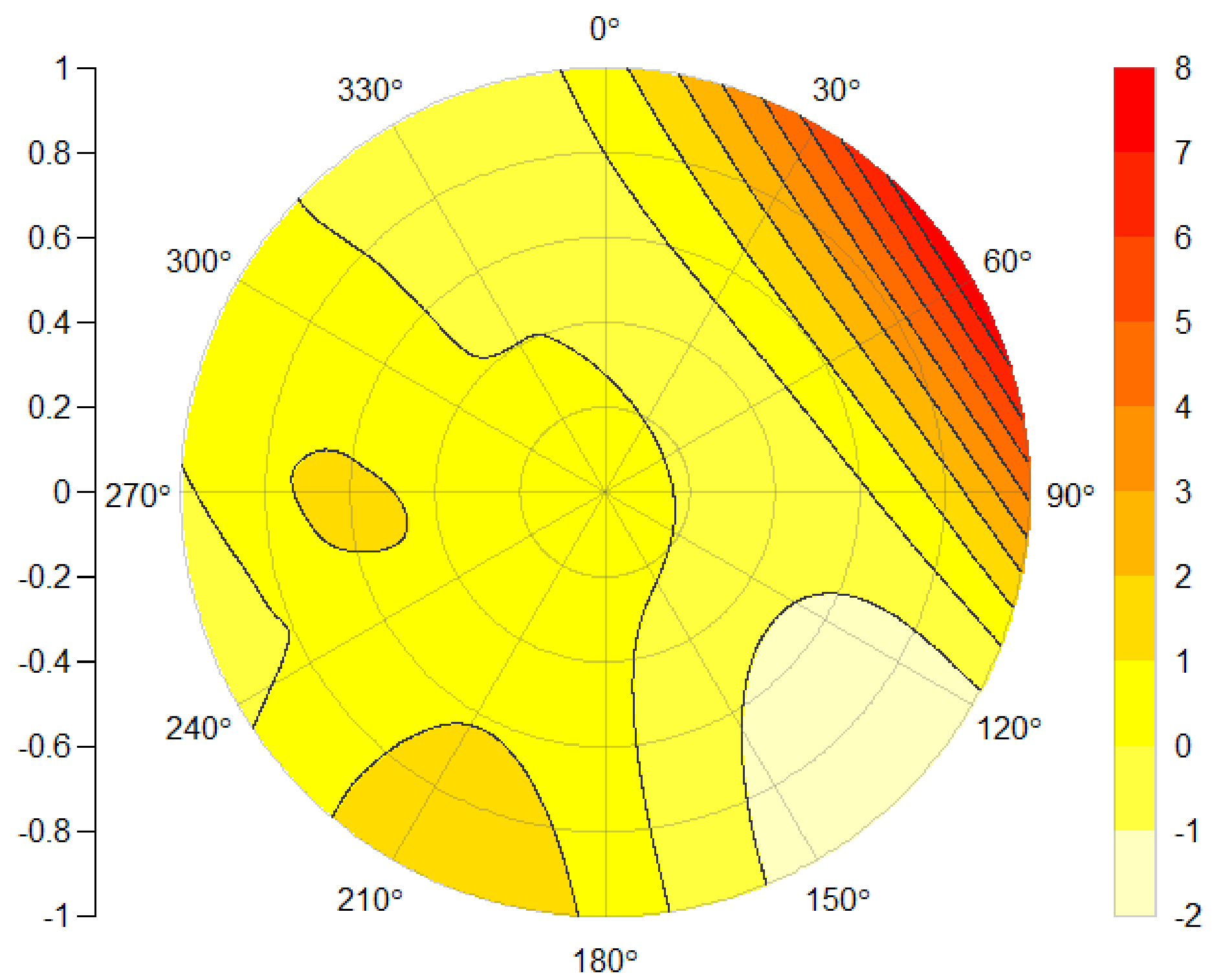
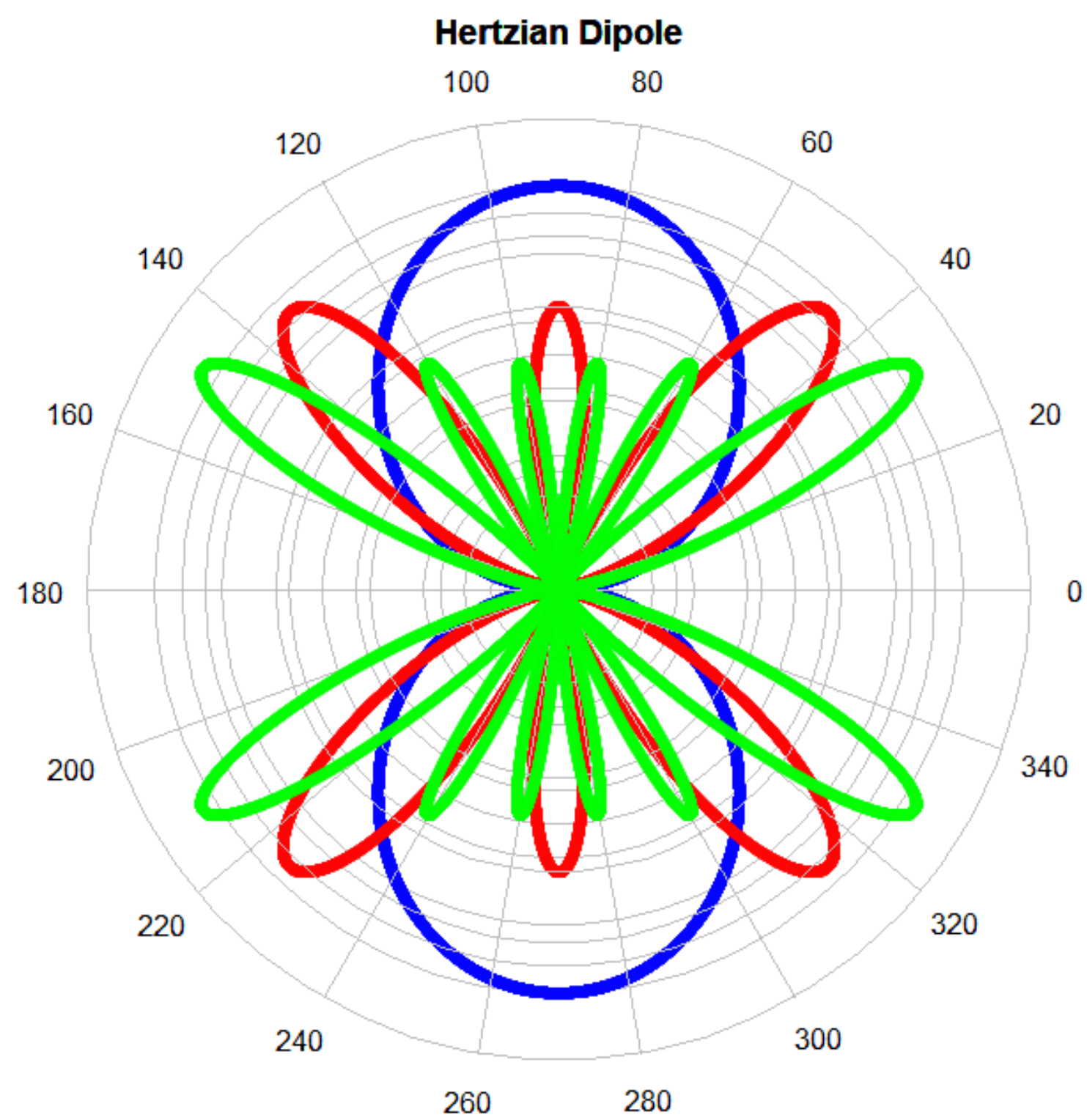




## Radial charts (nightingale rose chart)

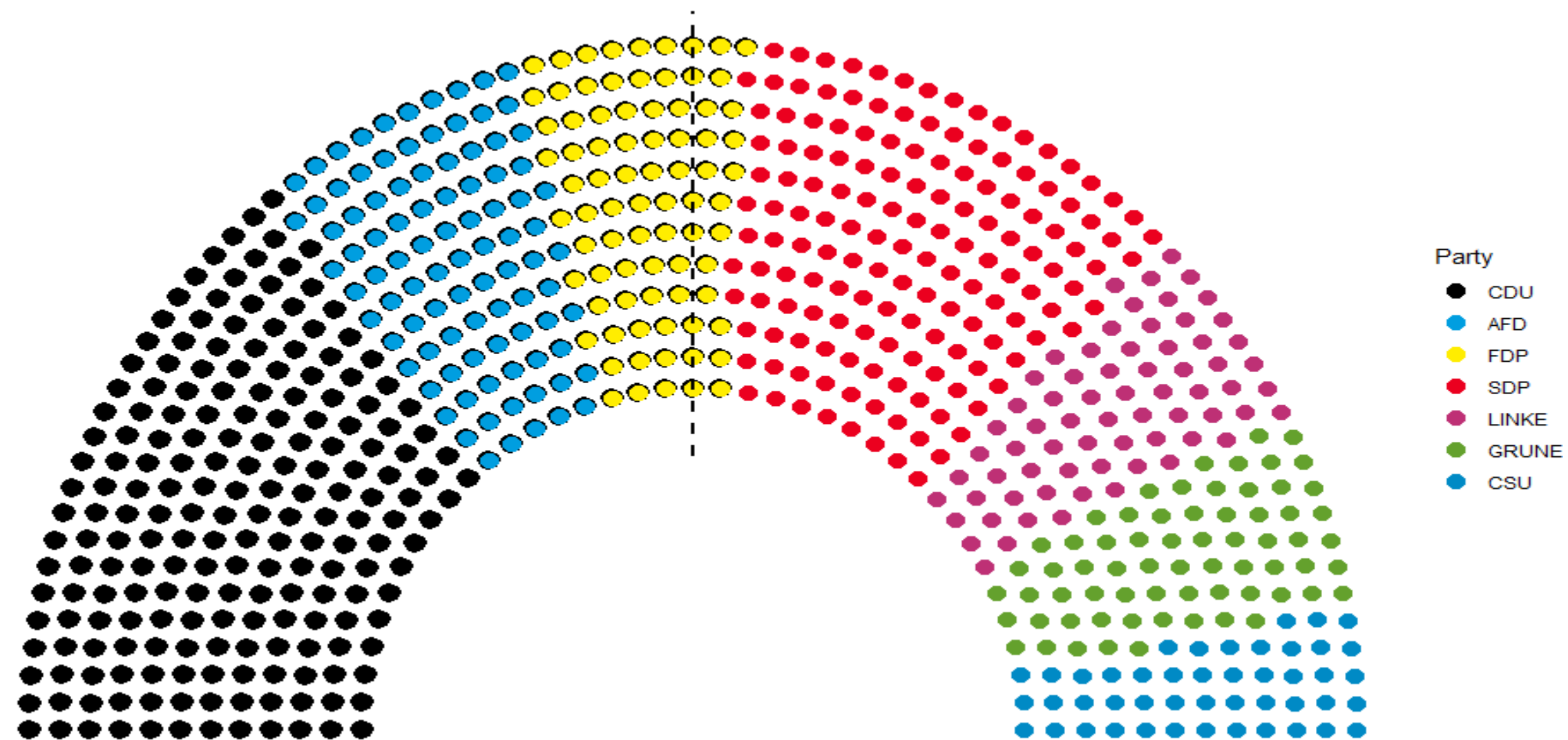


# Polar plot



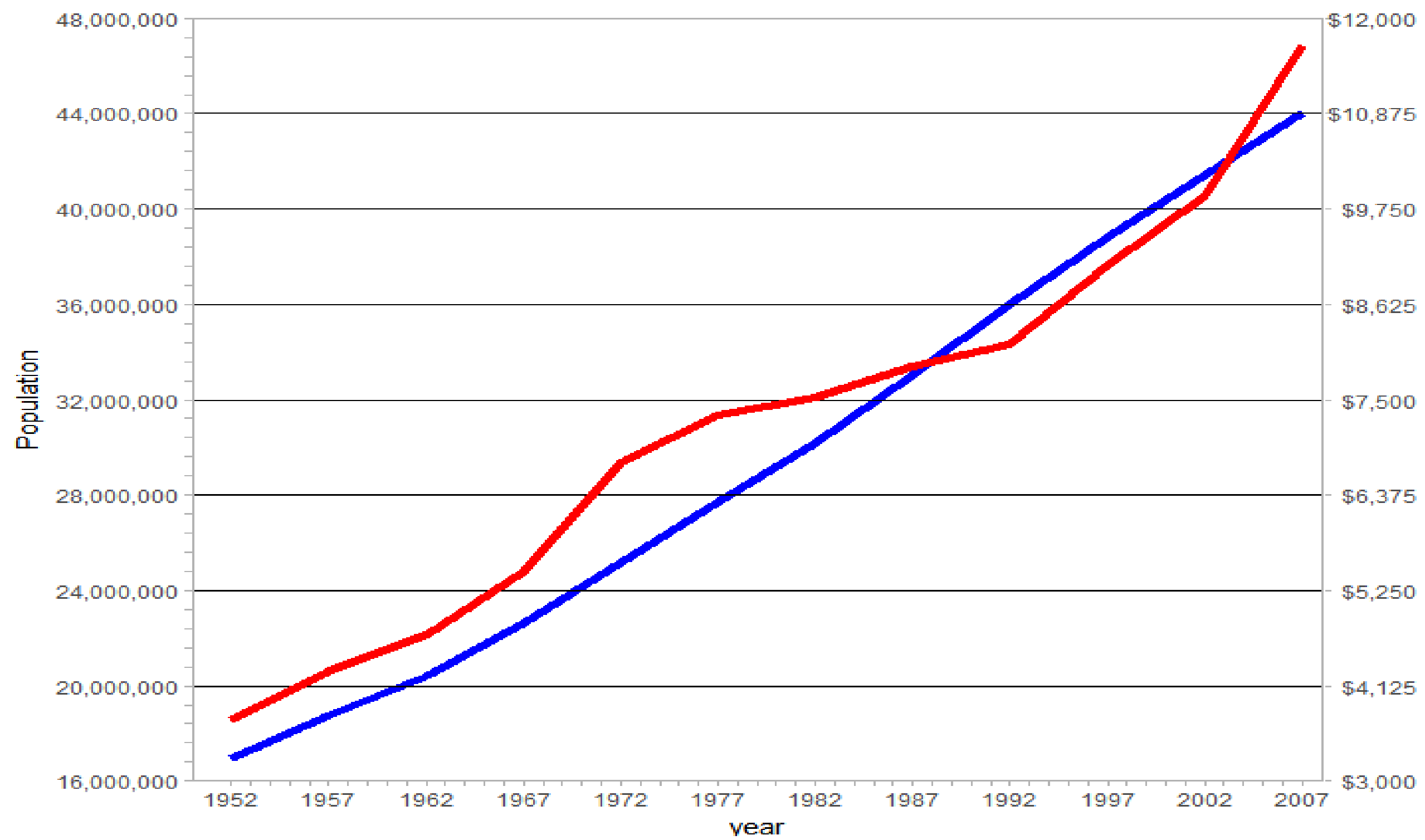
# Hemicycle

Germany 2017 Election Results

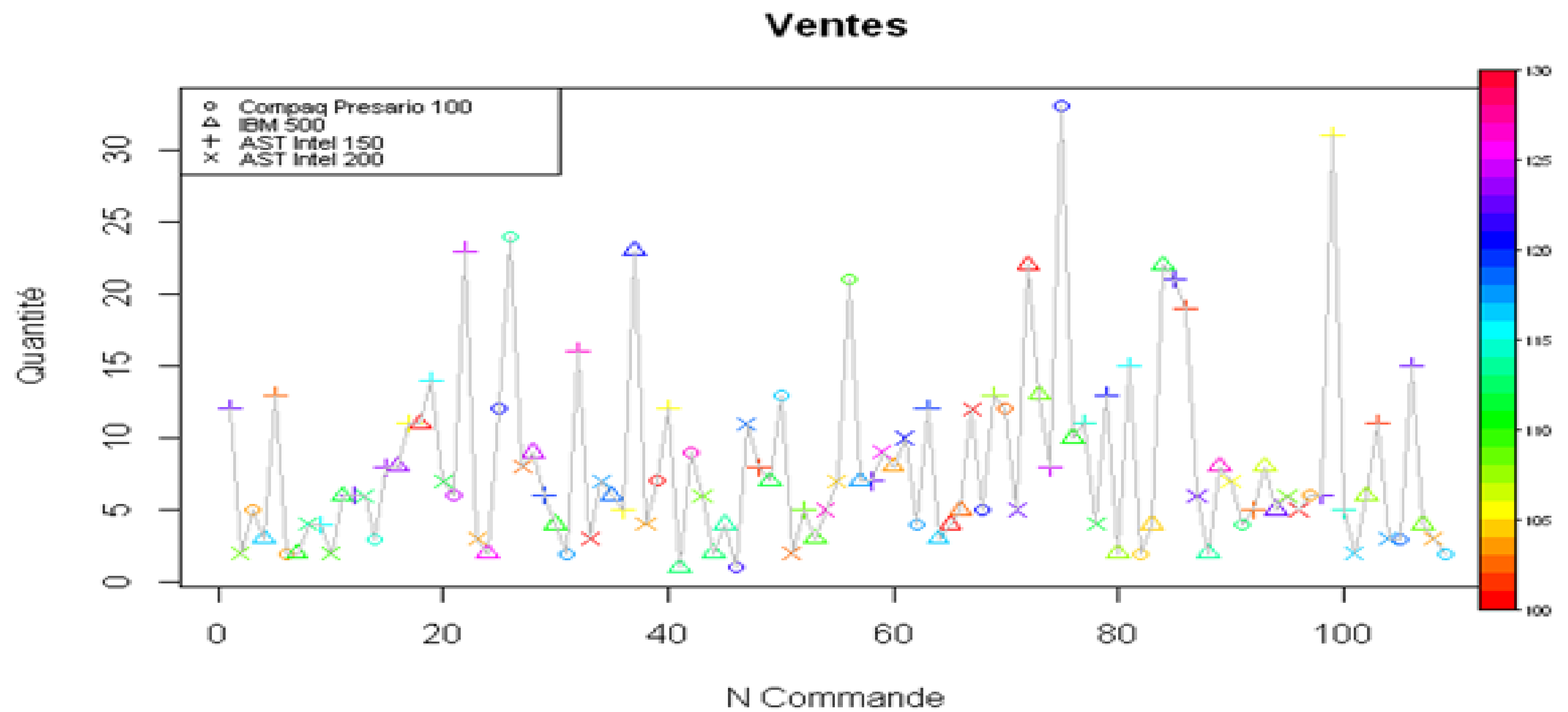


# Lines and Curves Charts

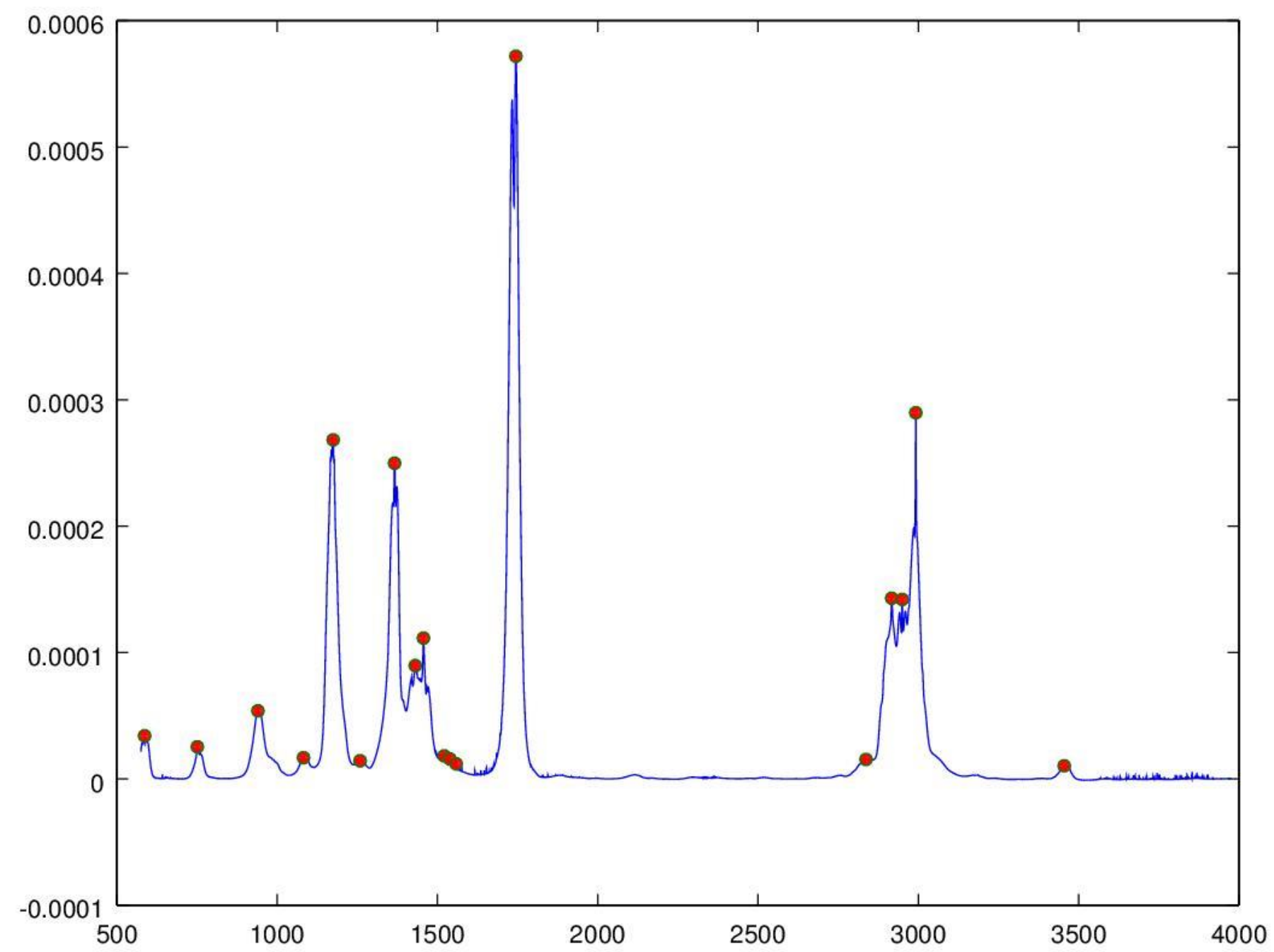
## X-Y lines chart



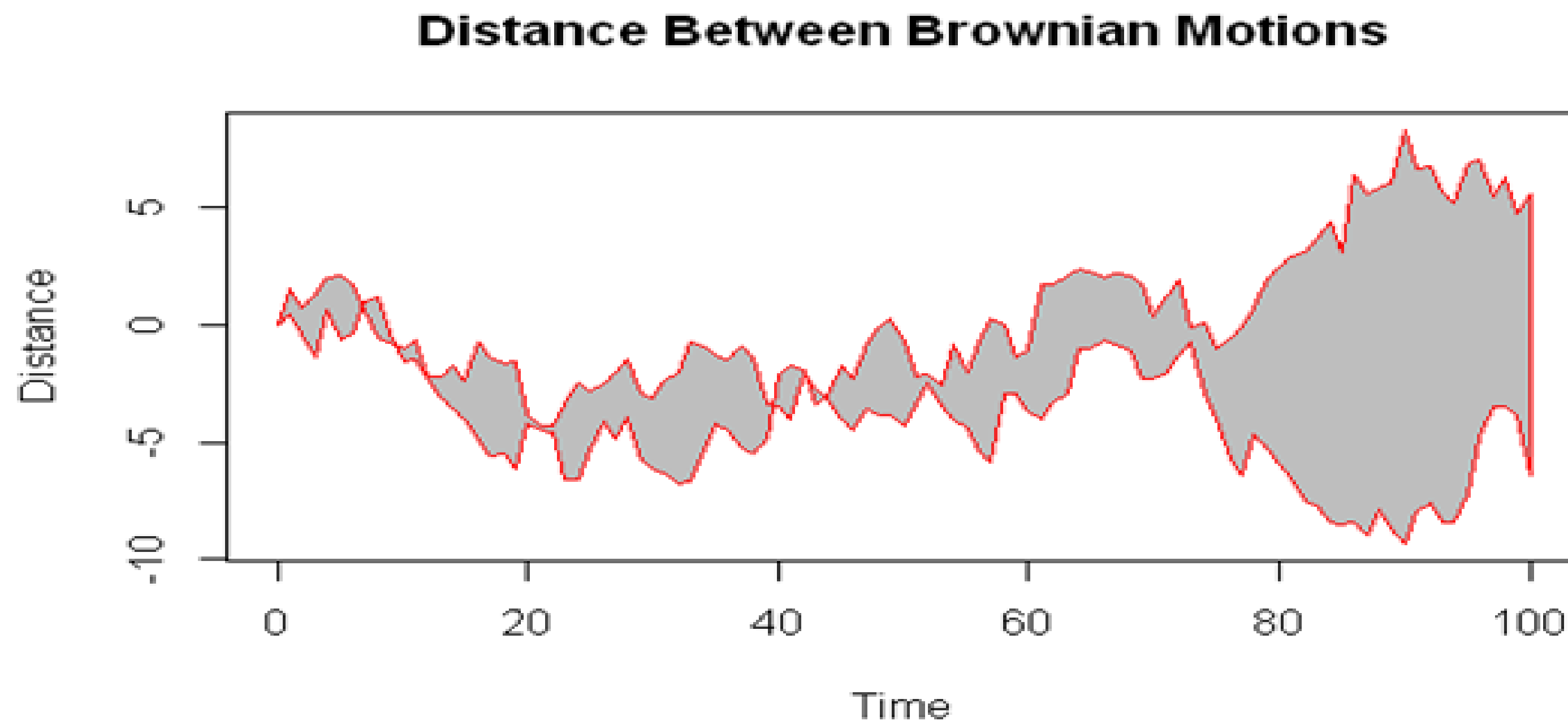
## Mixed point-line chart



# Frequency spectrem chart (Fast Fourier Tranform chart)

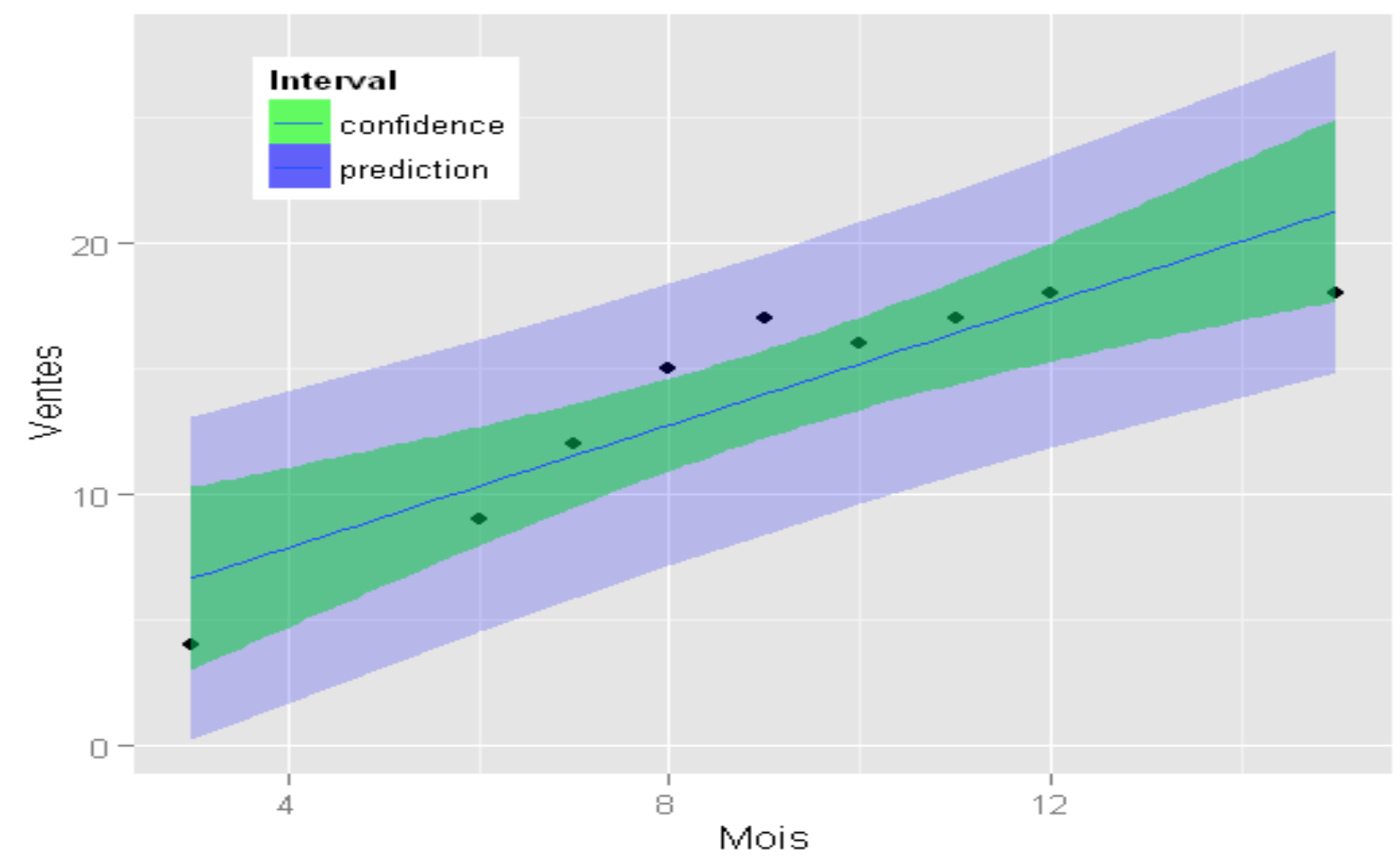
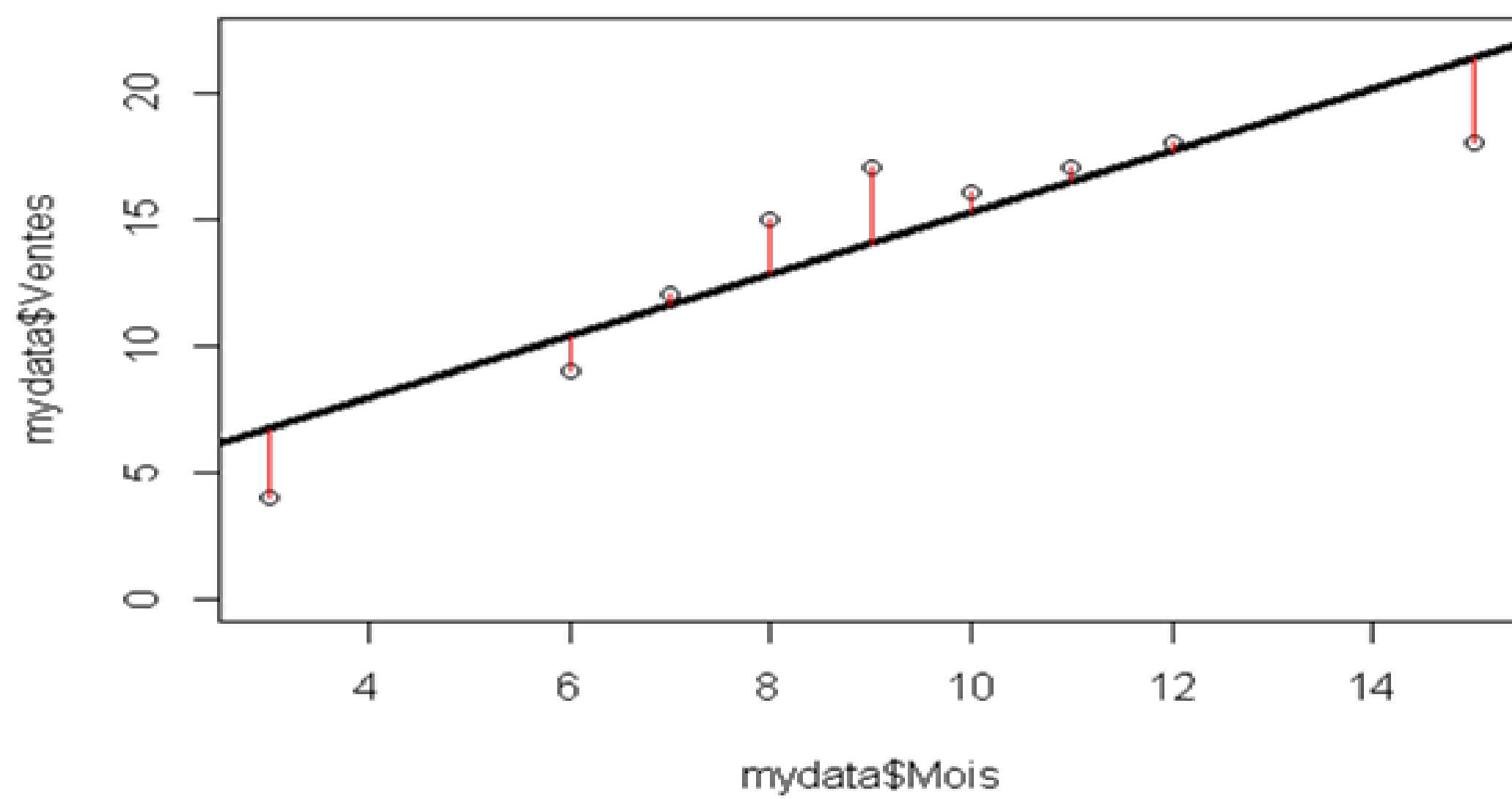


## Line chart with polygons

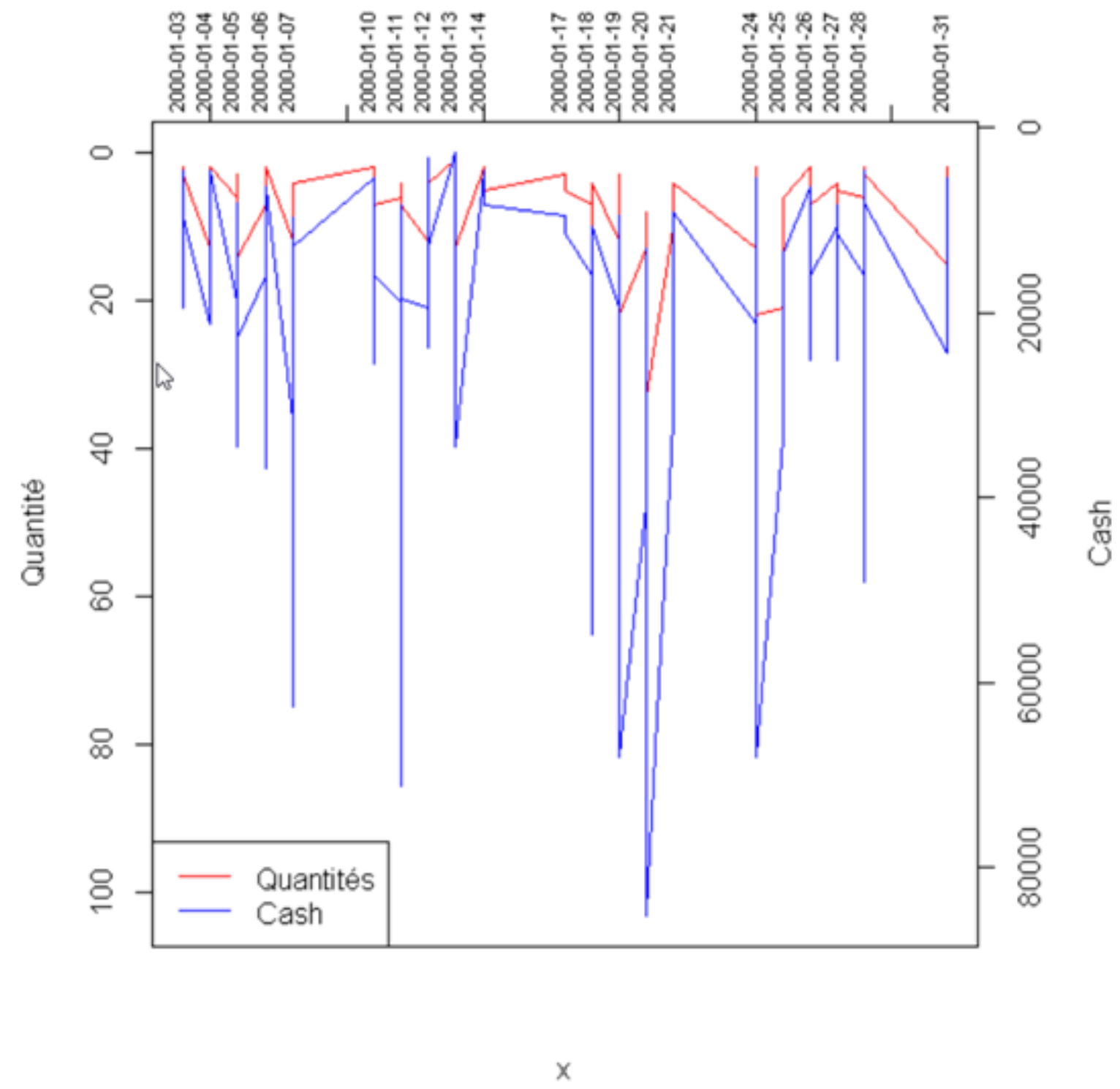




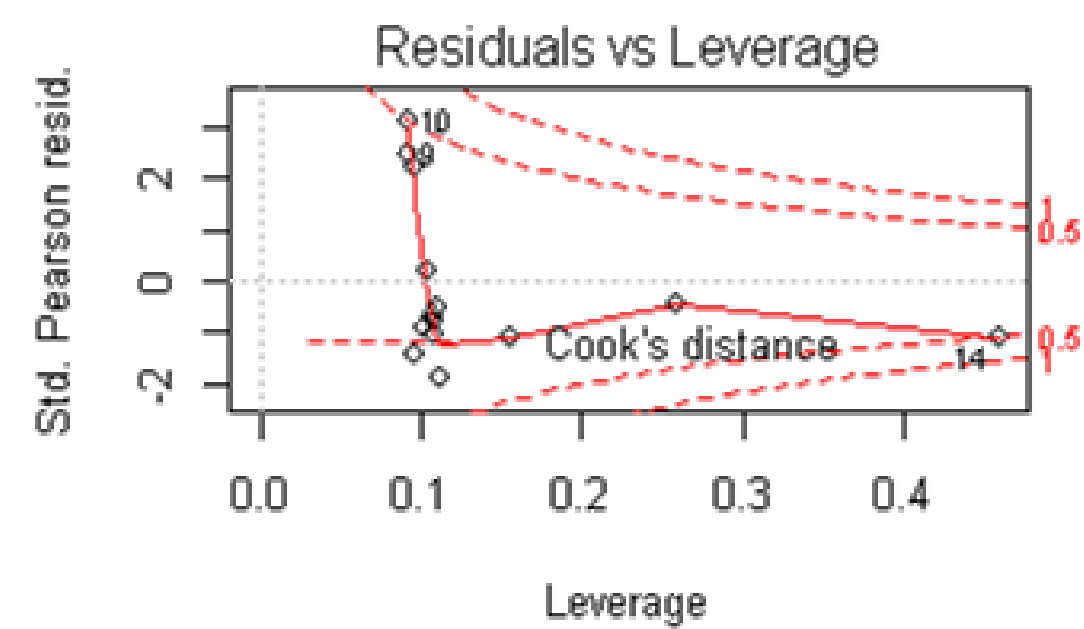
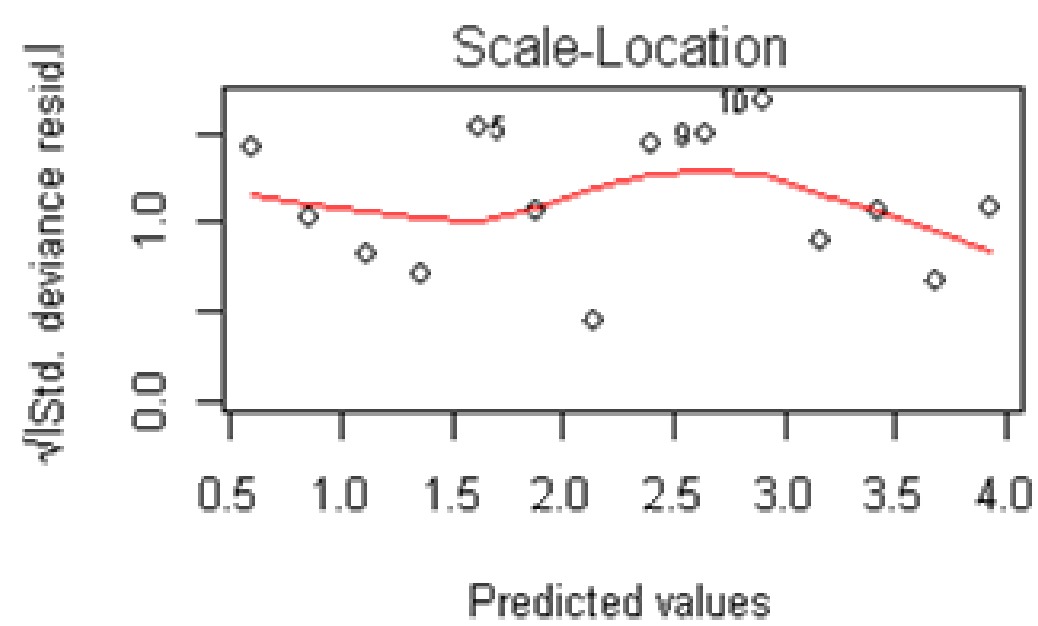
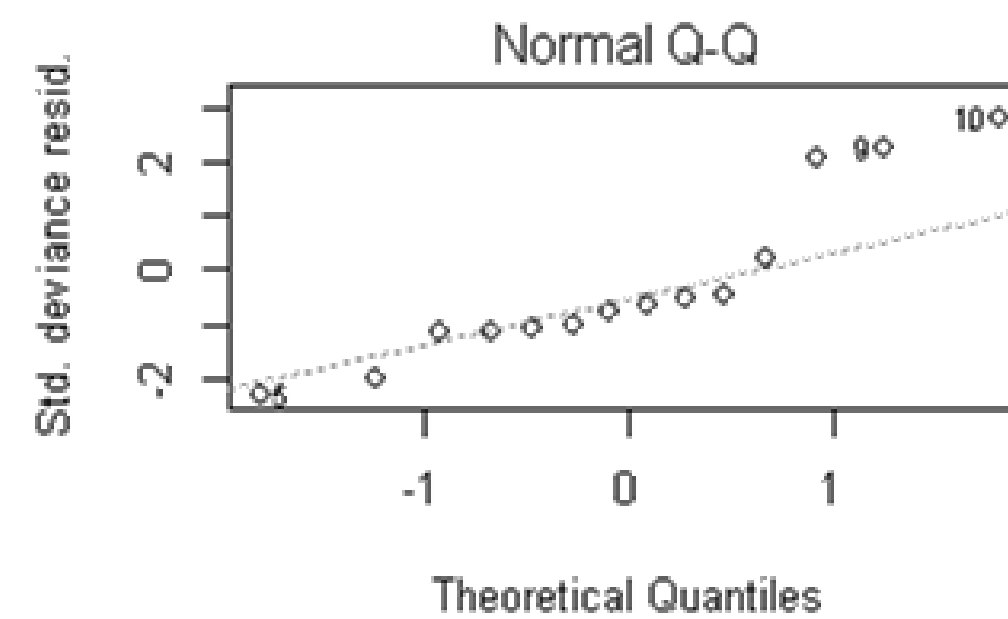
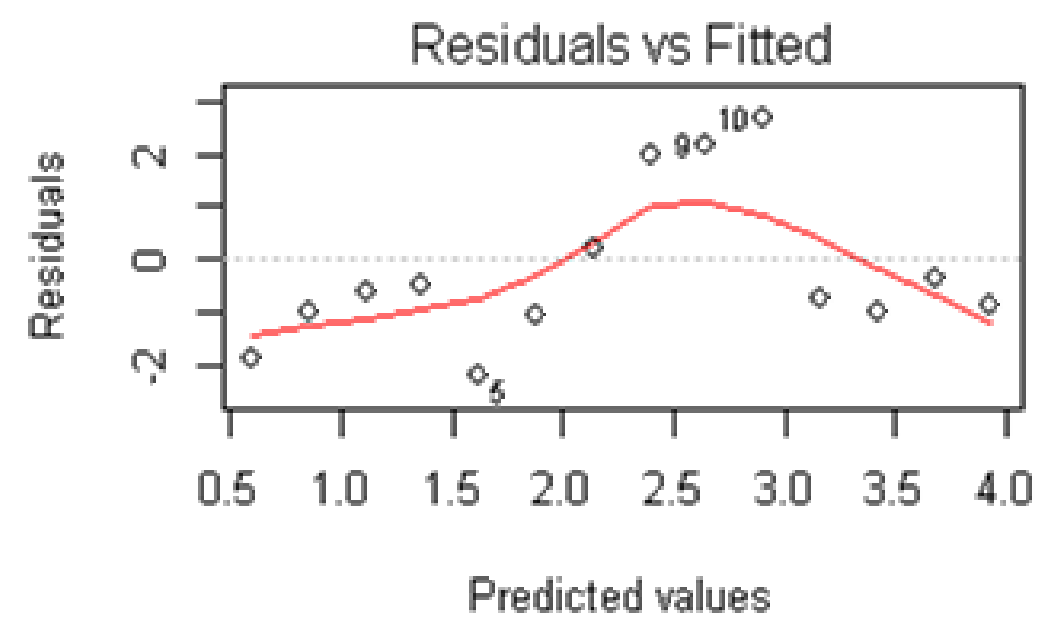
## Trend cuves: Confidence and Prediction intervals



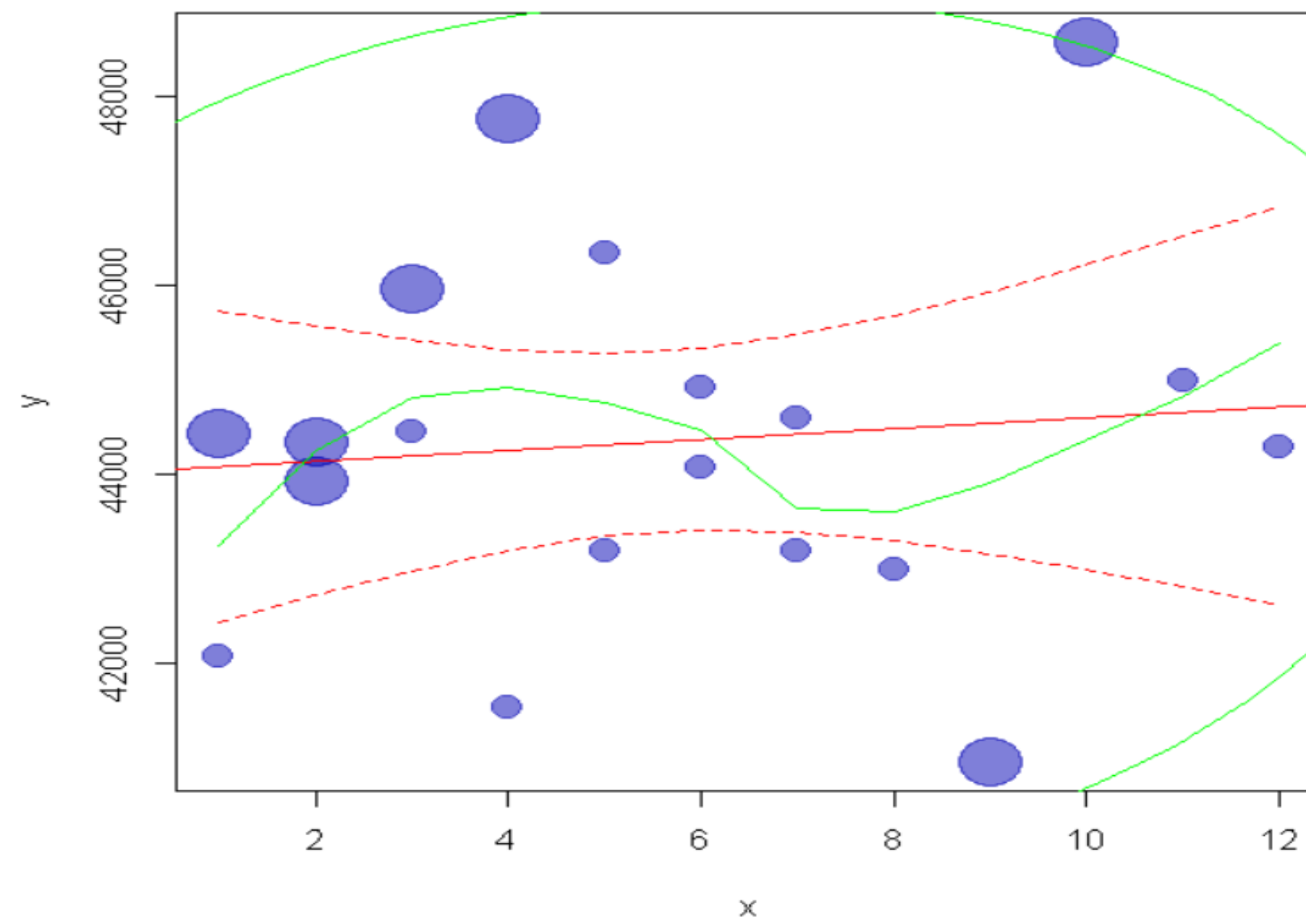
# Multi Axes charts



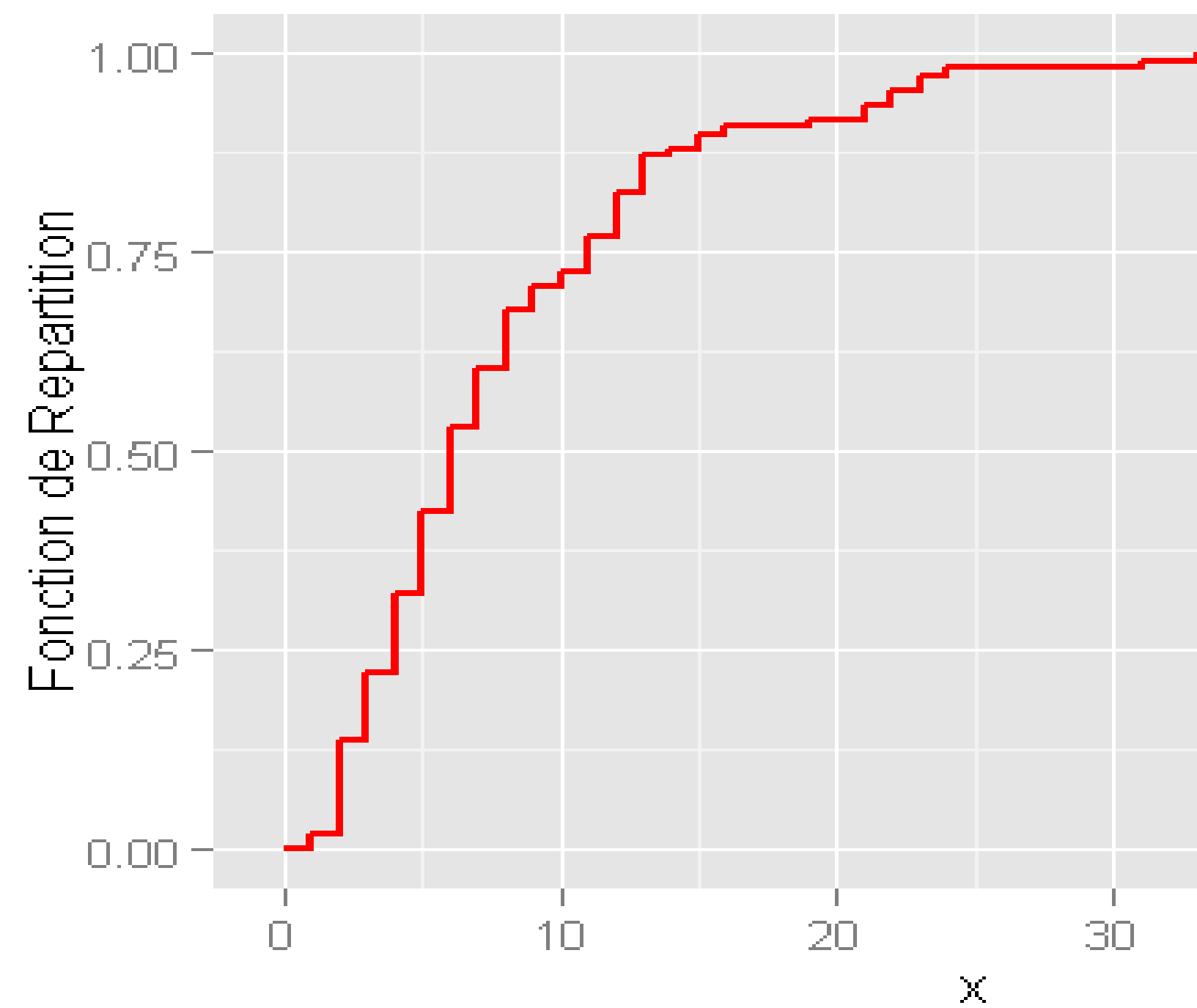
# Linear regressions diagnostic charts



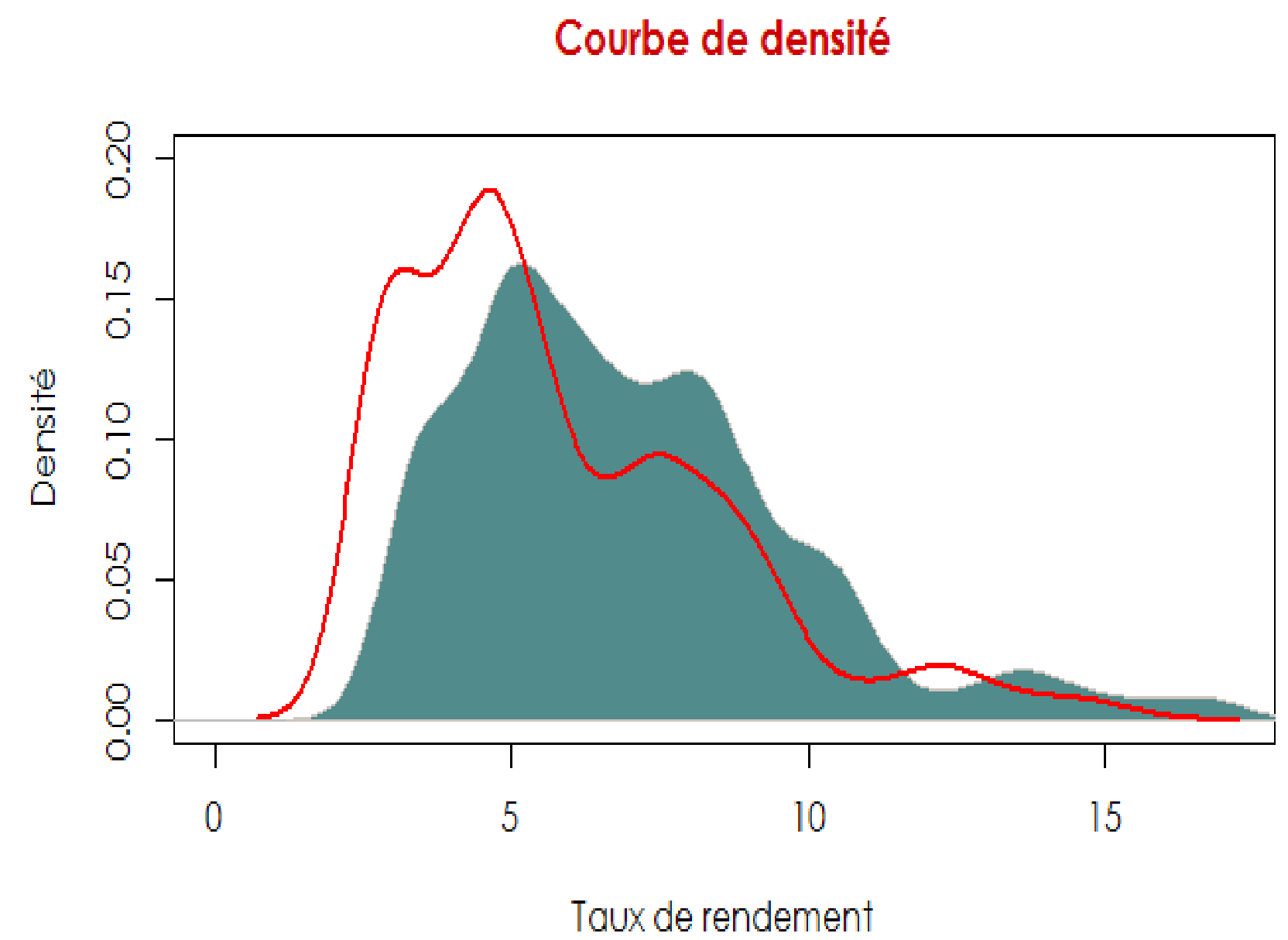
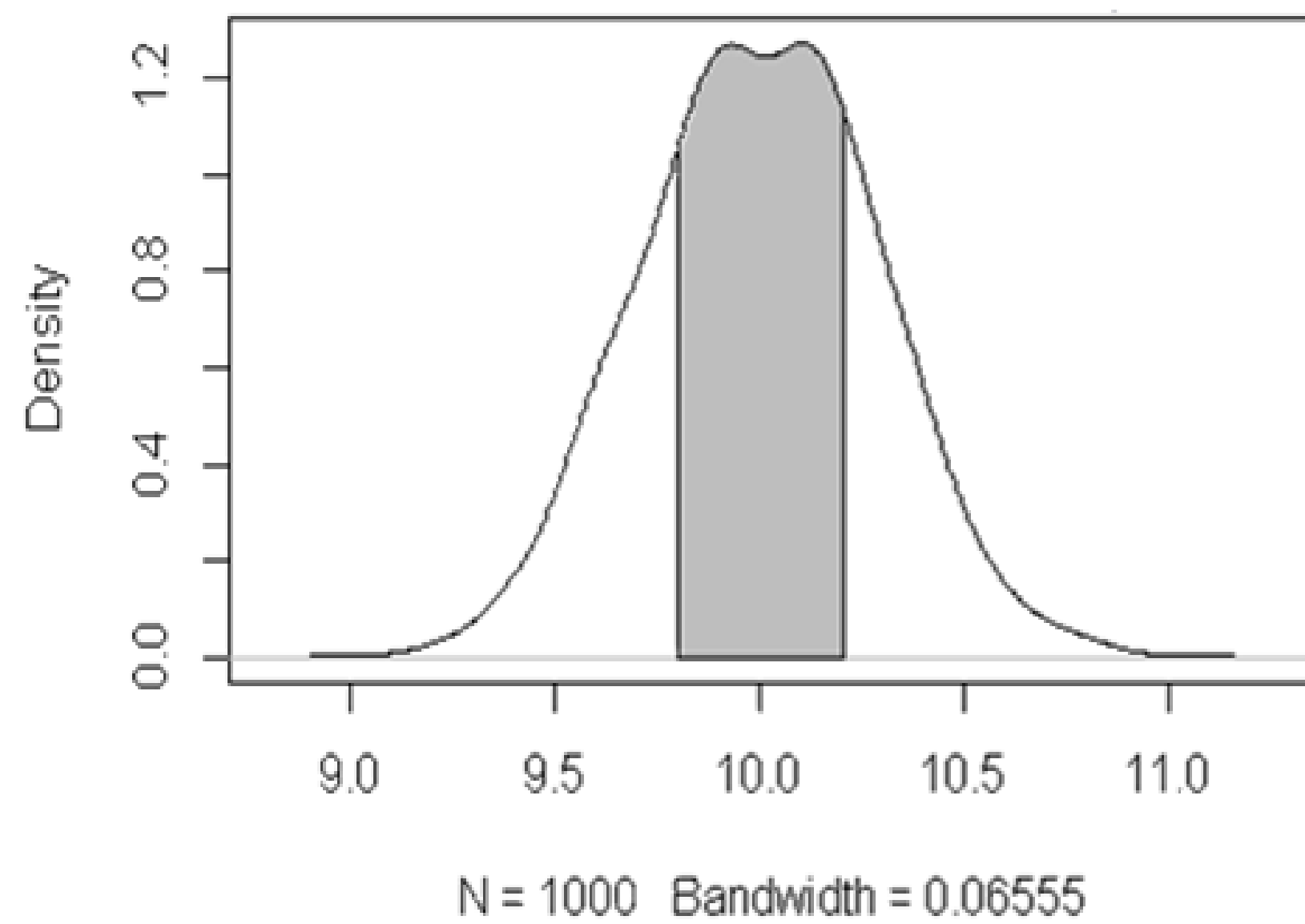
# LOESS regression chart



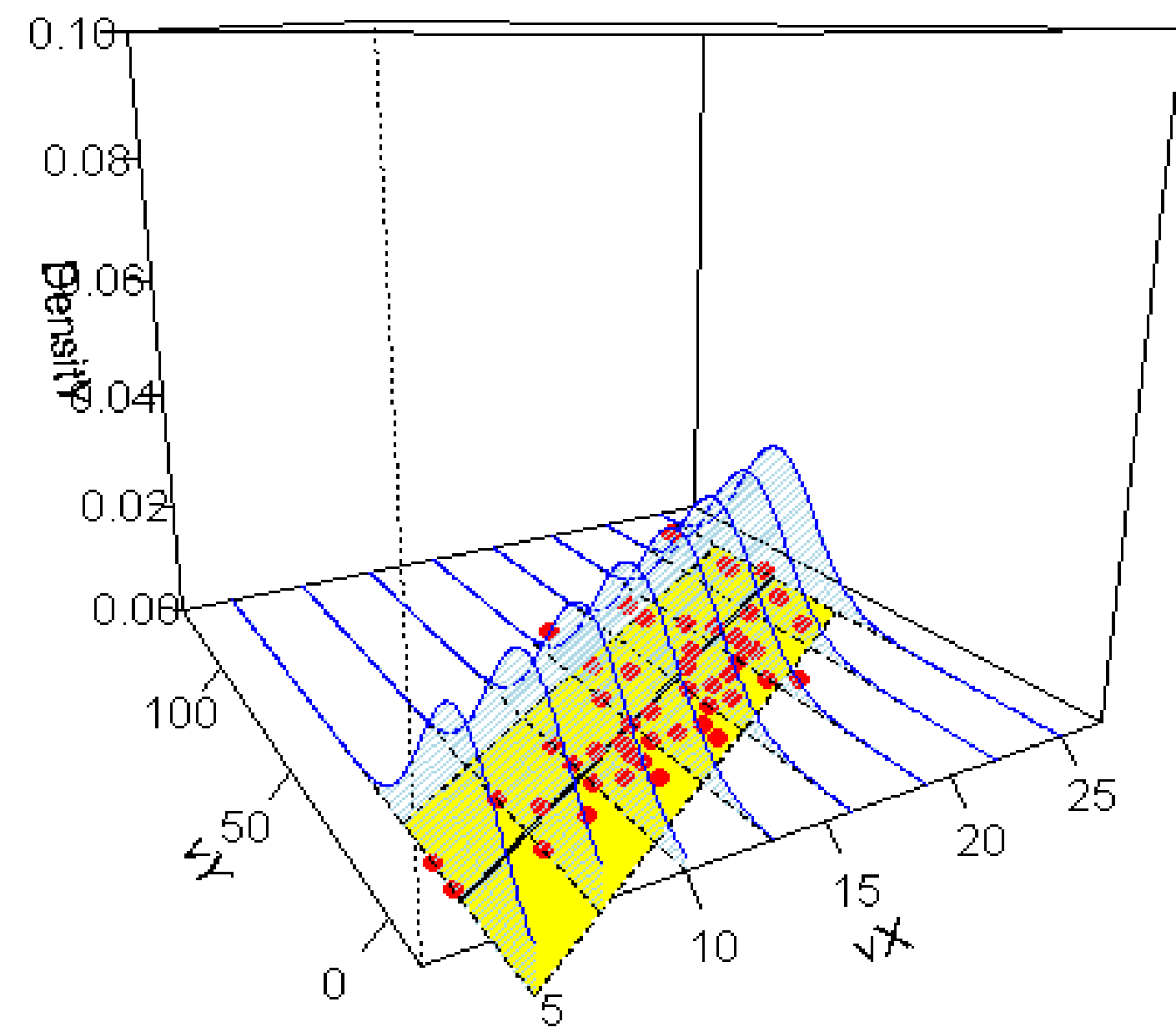
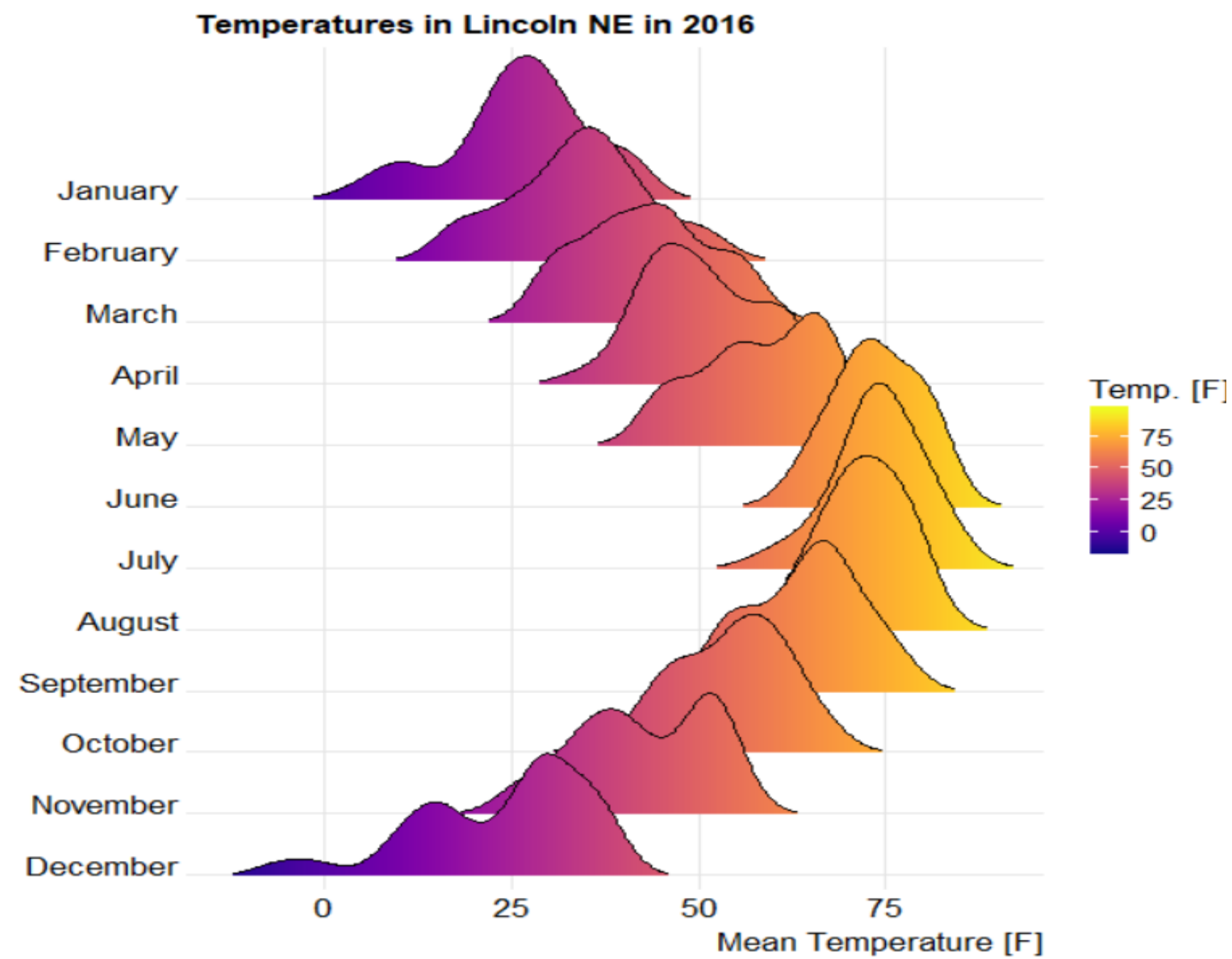
## Step chart (cumulated function chart)



# Curves and Intervals density charts



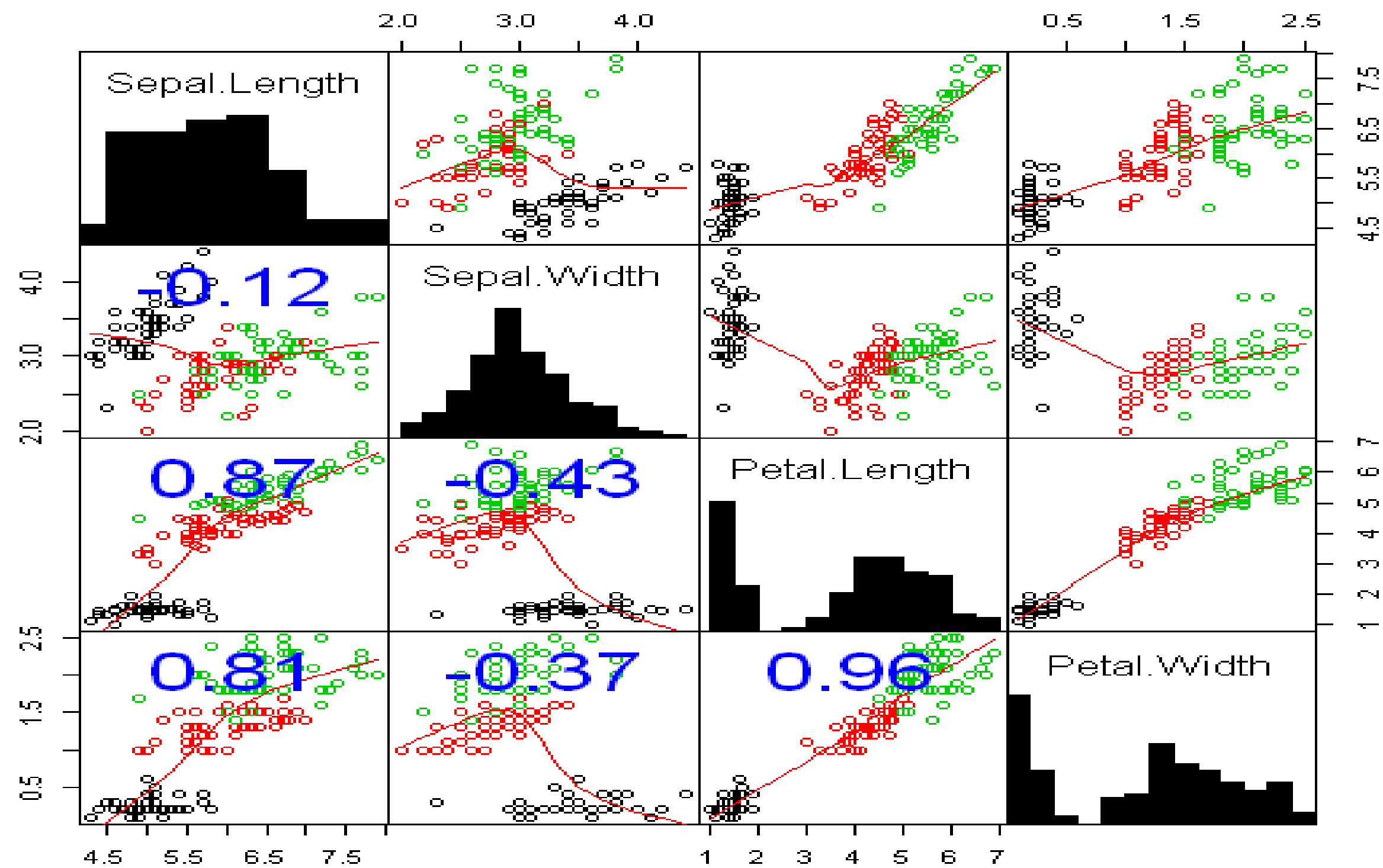
# Joy charts



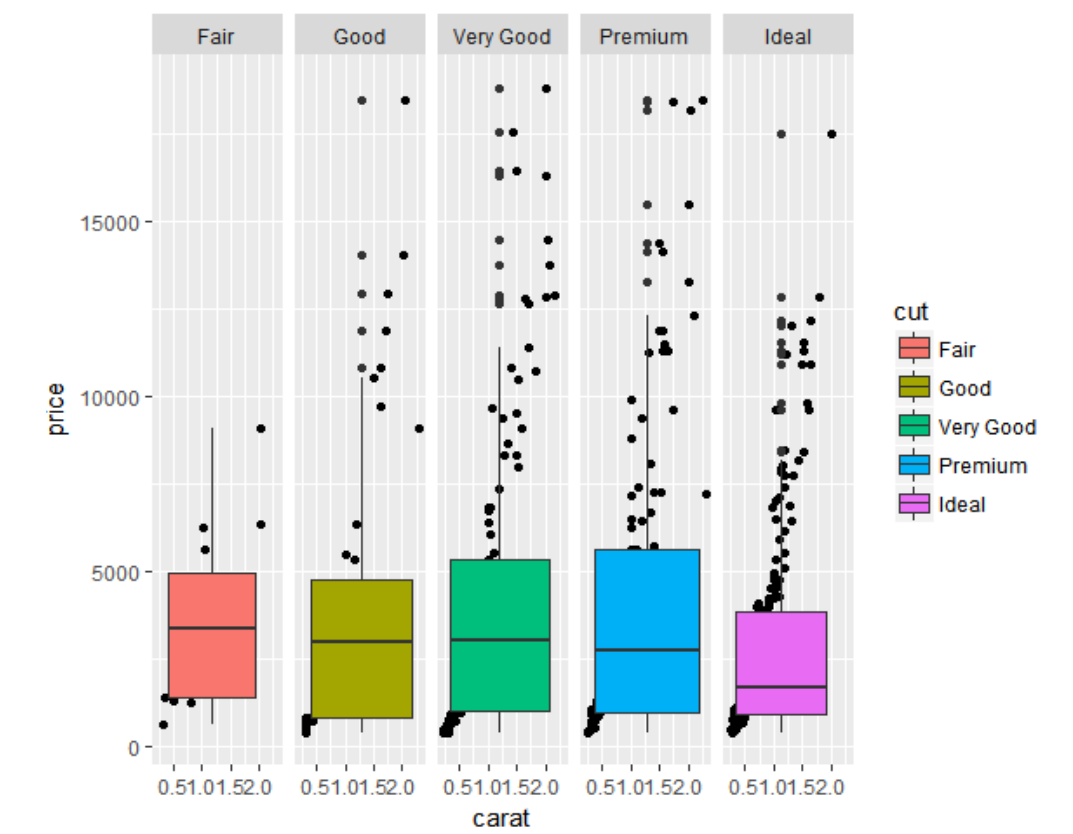
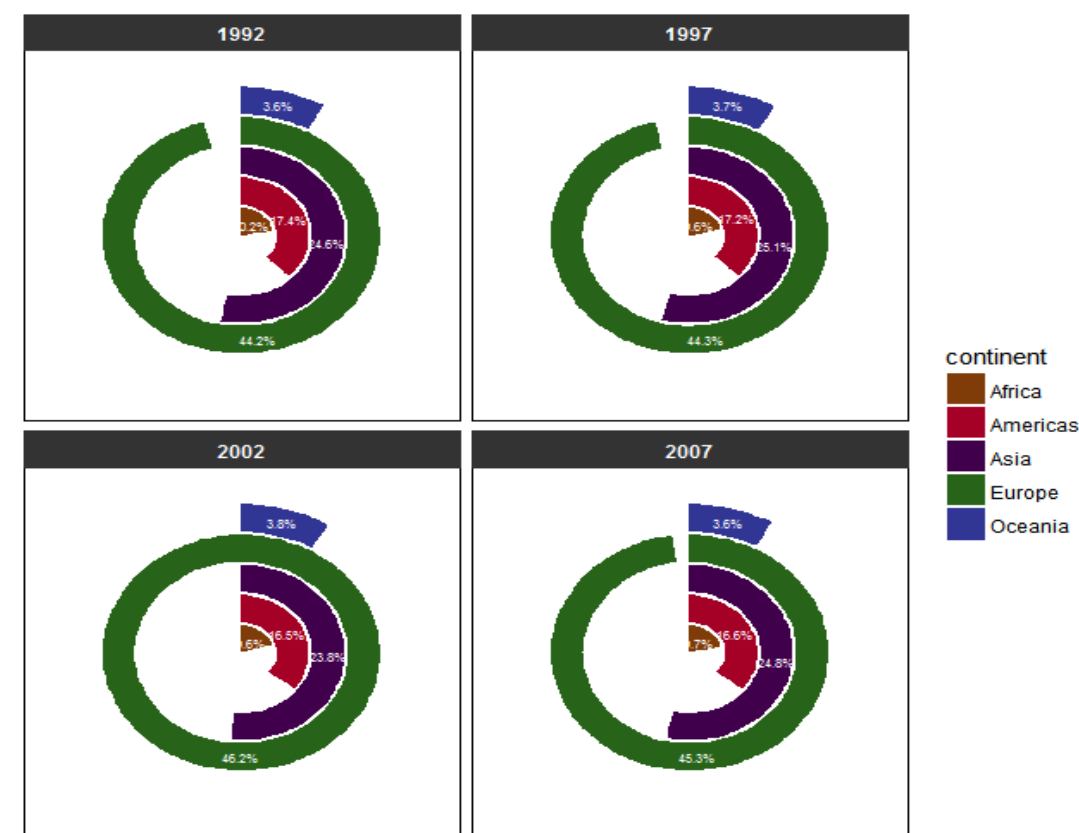
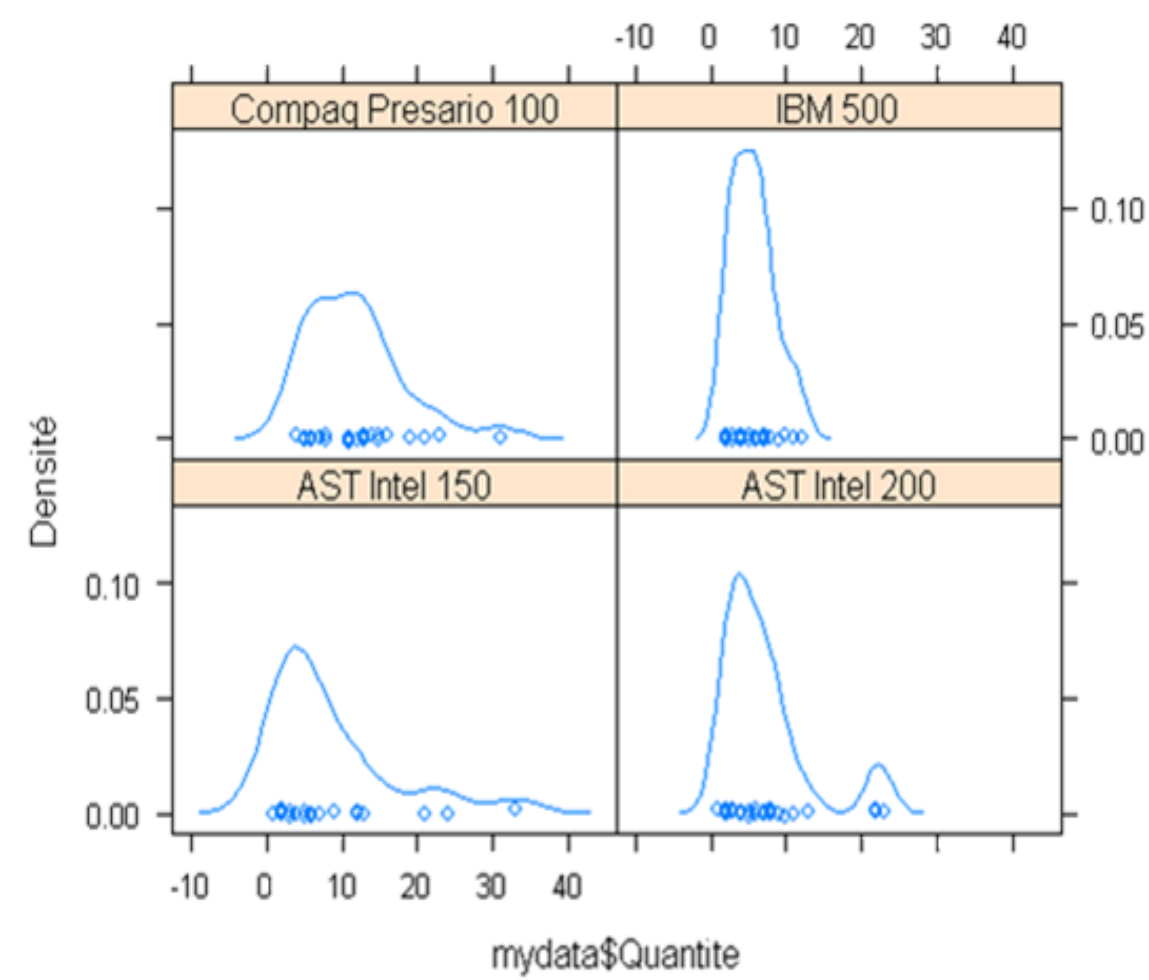
# Margin and Lattice Charts



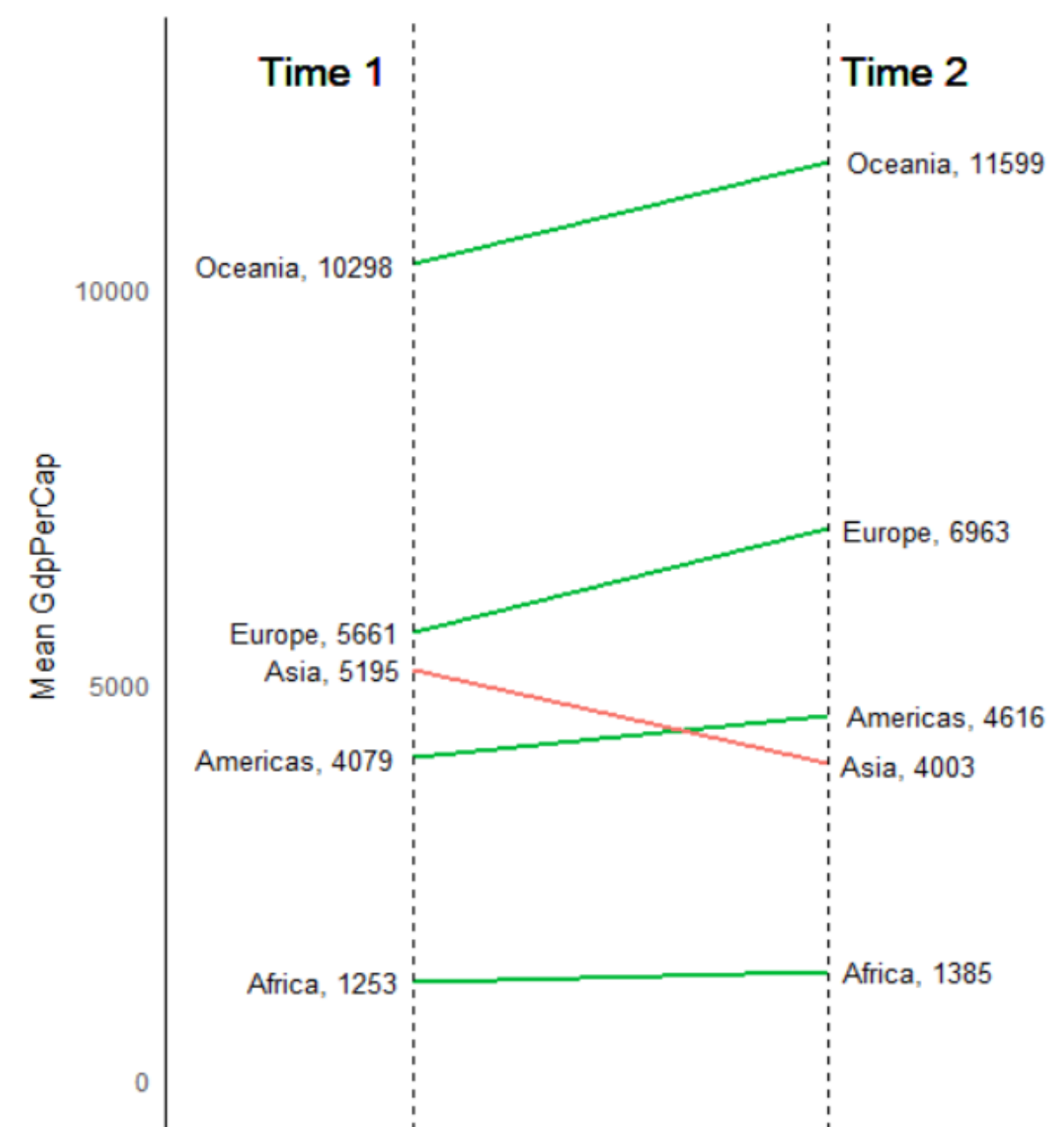
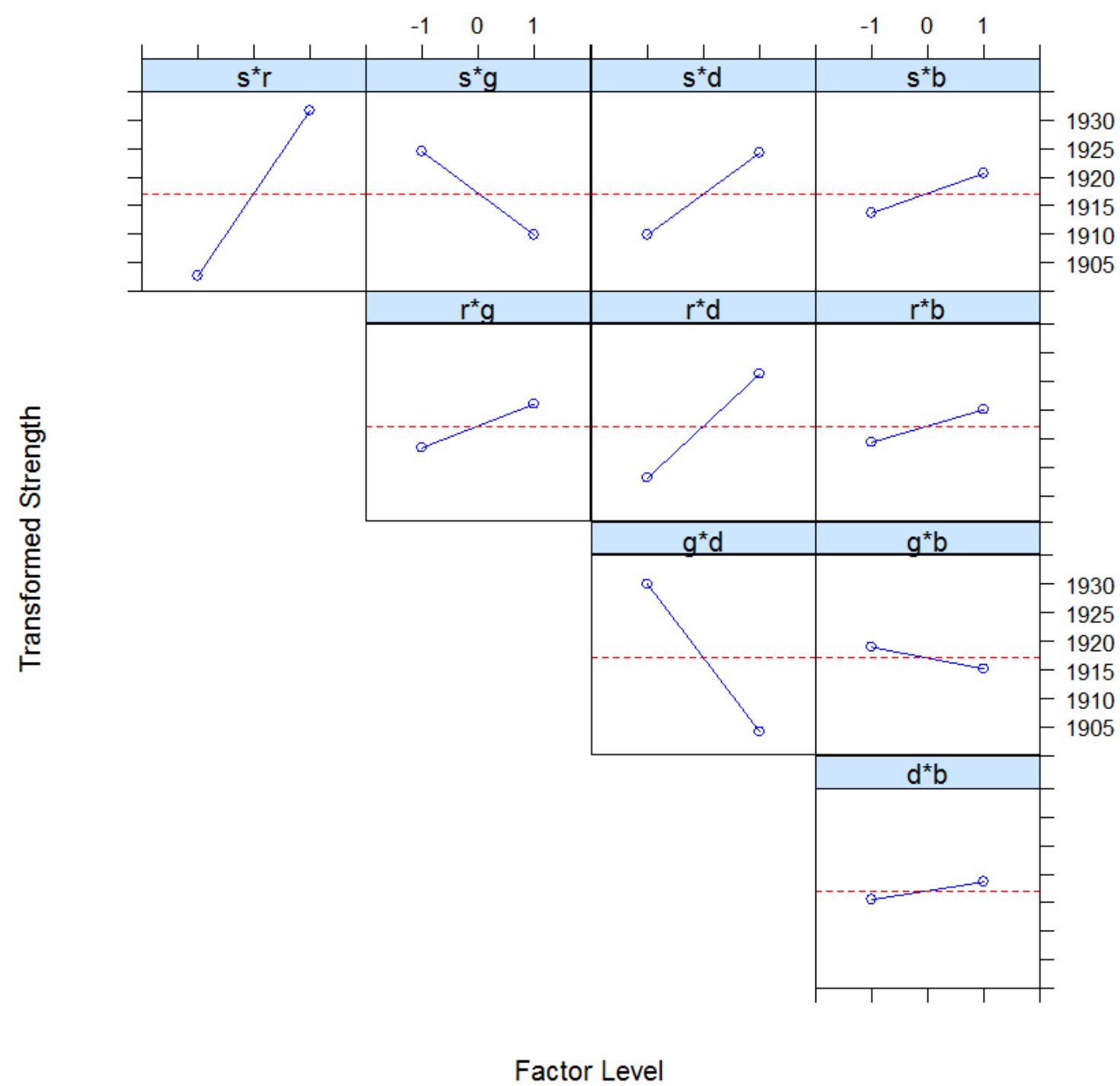
# Draftsman's chart (matrix Scatterplot)



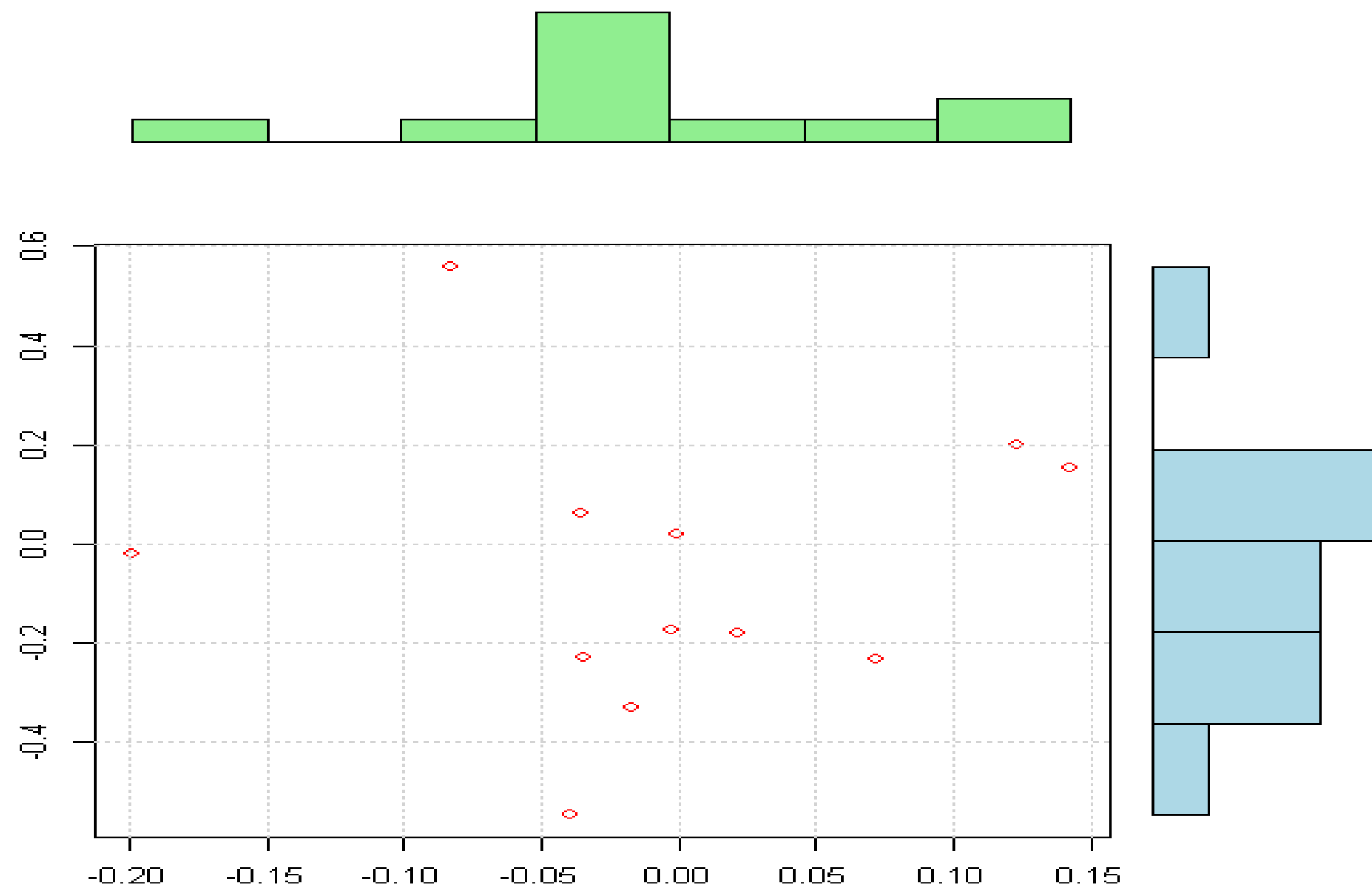
# Lattice charts



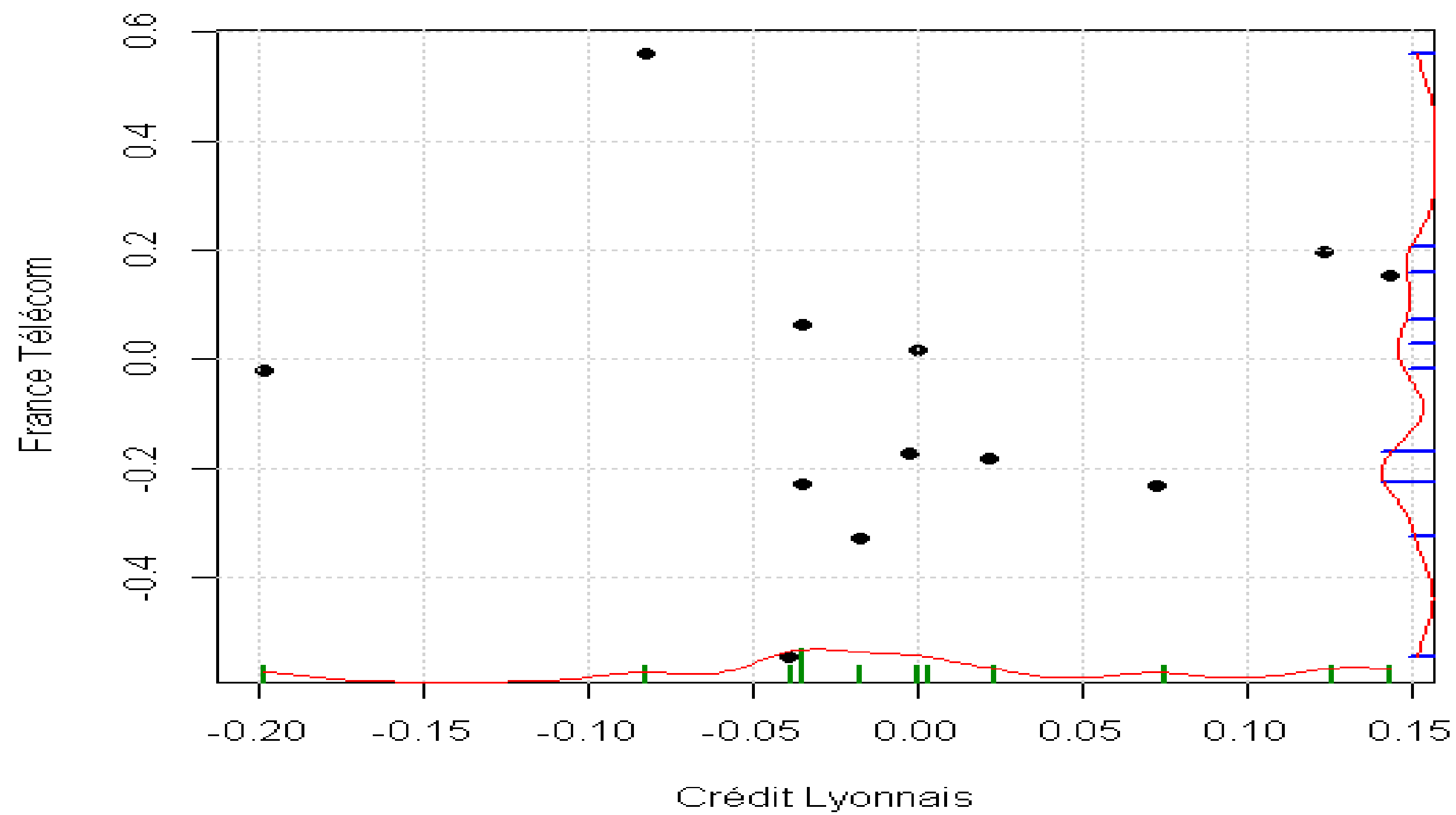
# Interactions charts



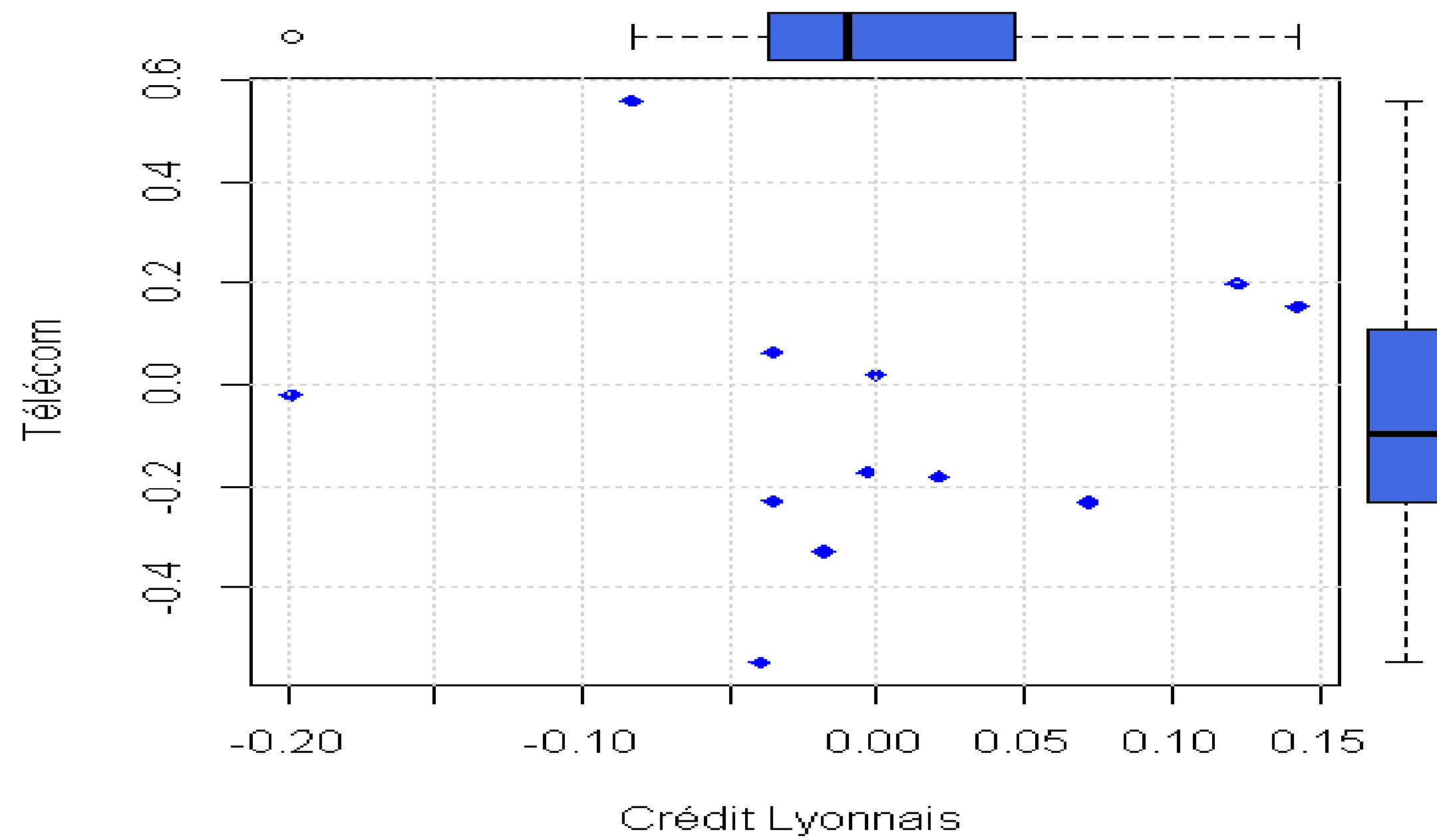
## Margin chart (with histogram)



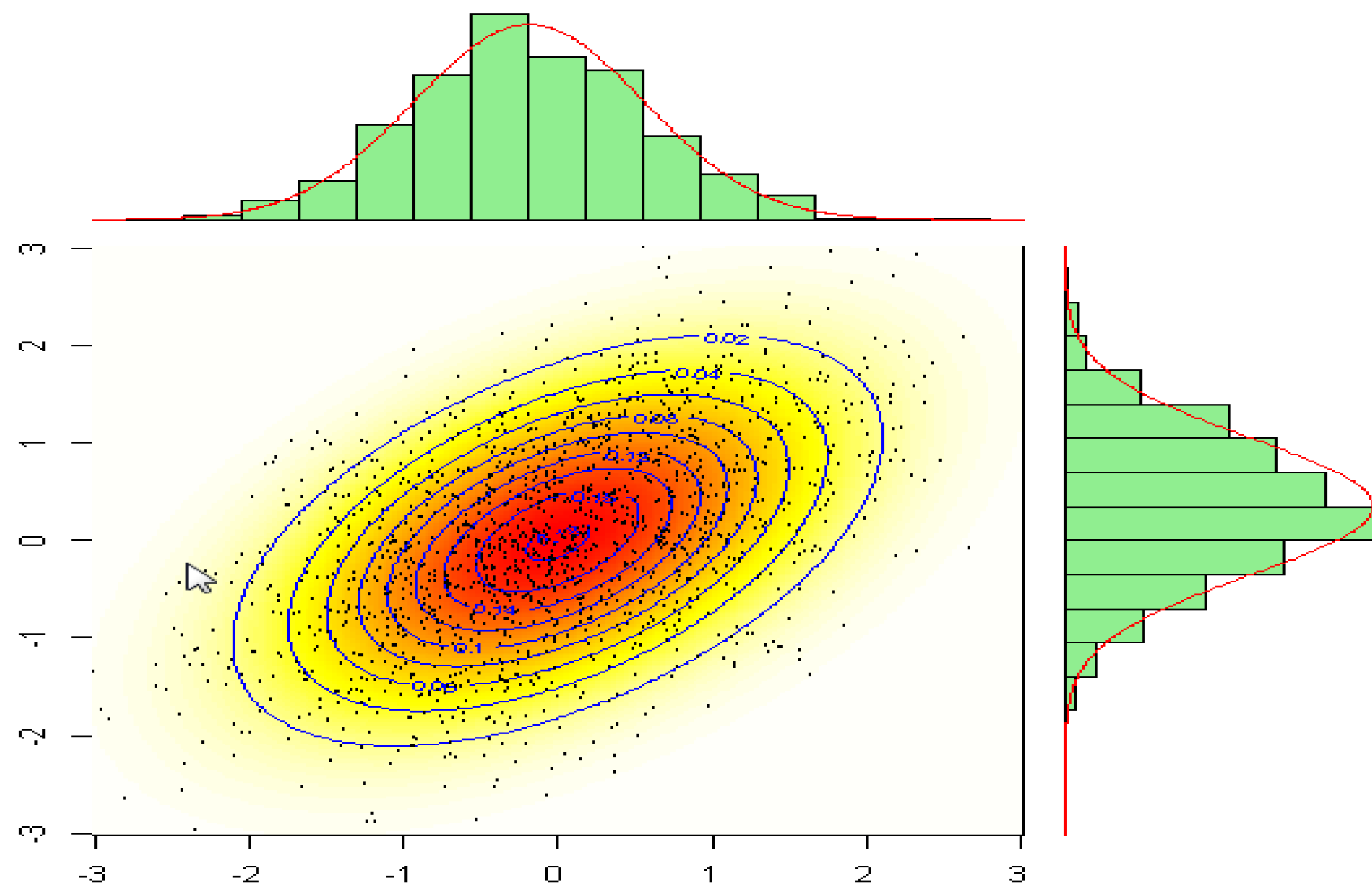
## Variation : HistSpyke



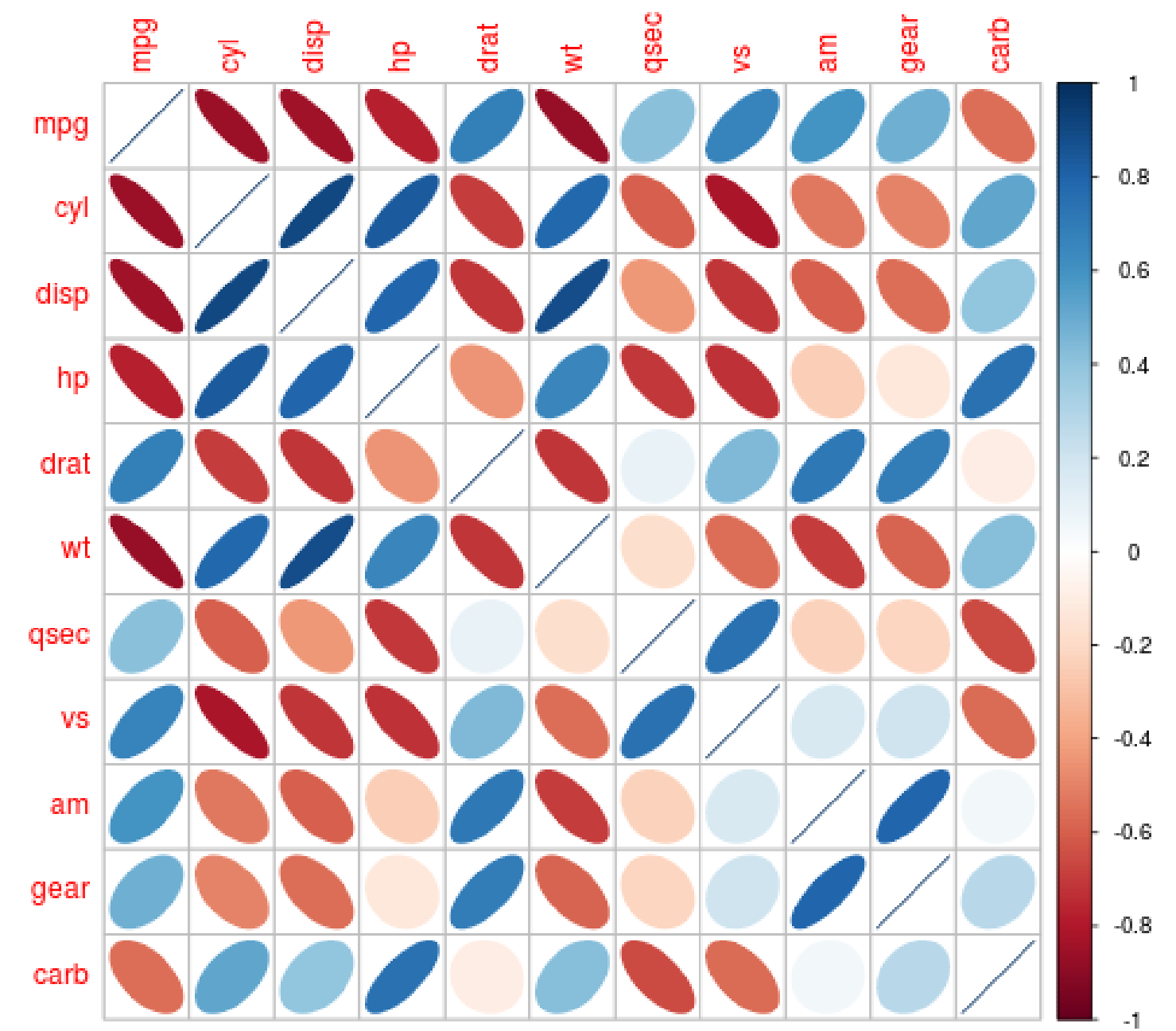
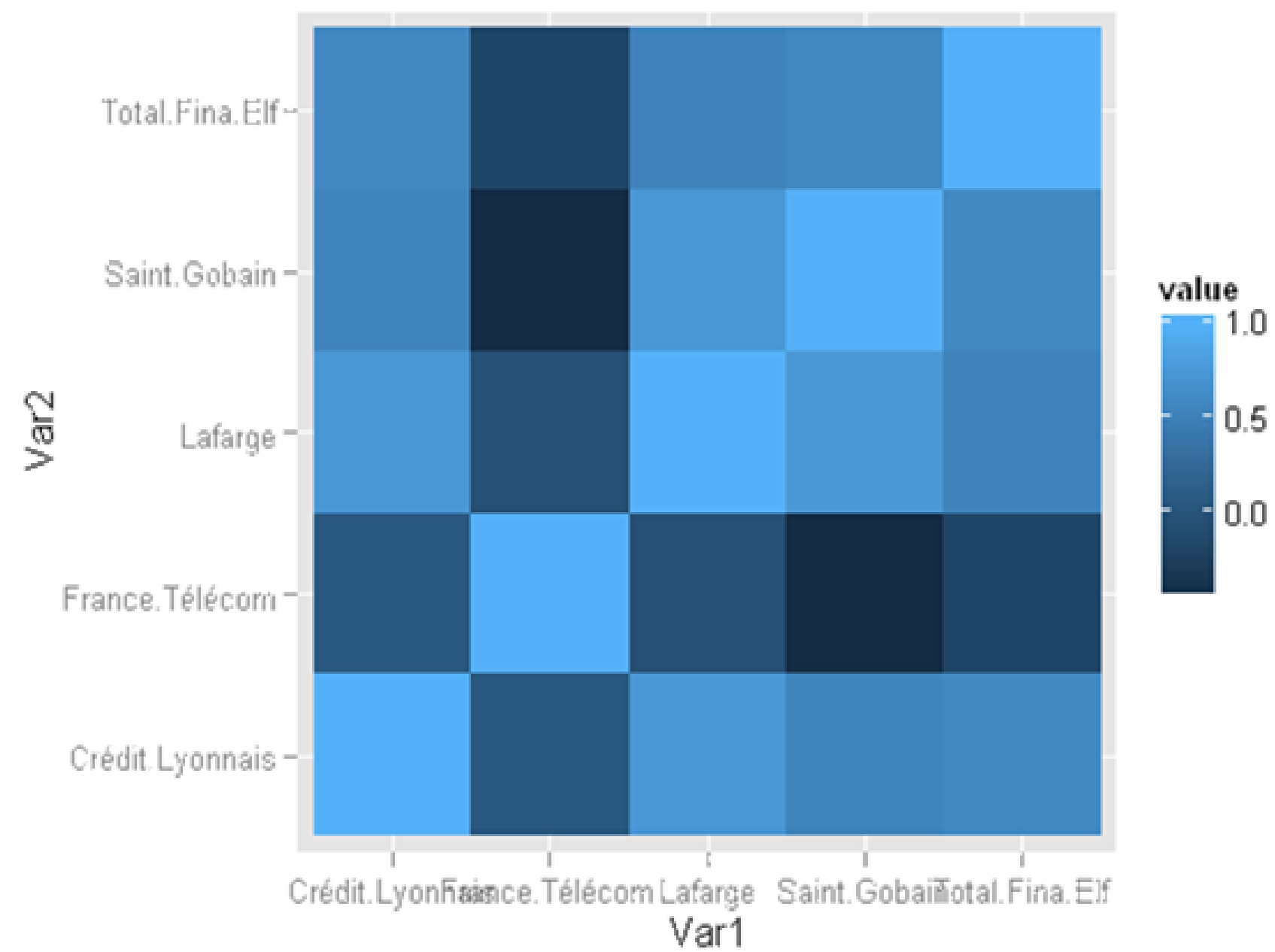
## Margin chart (with Box & Whisker)



# Confidence ellipse with margin histogram



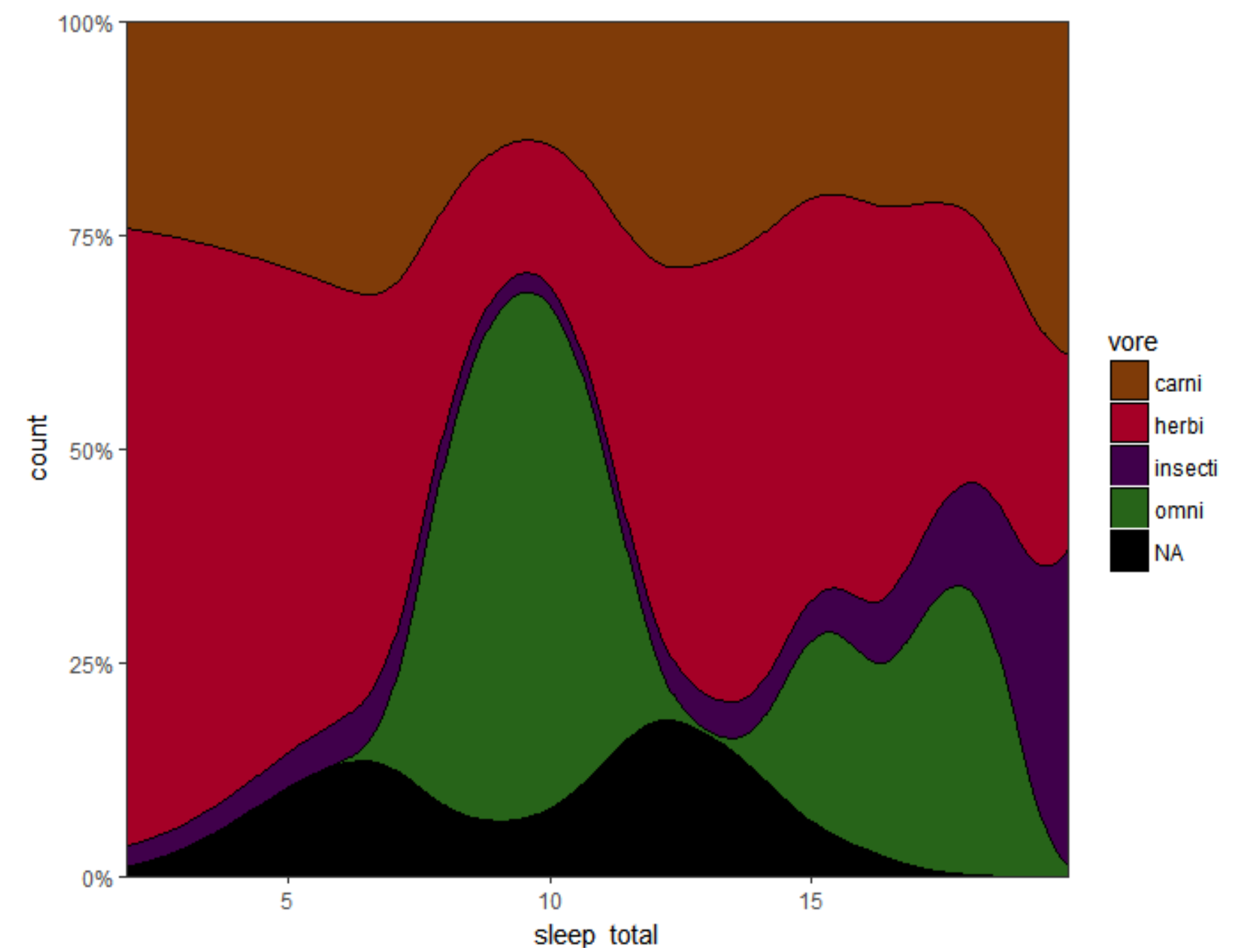
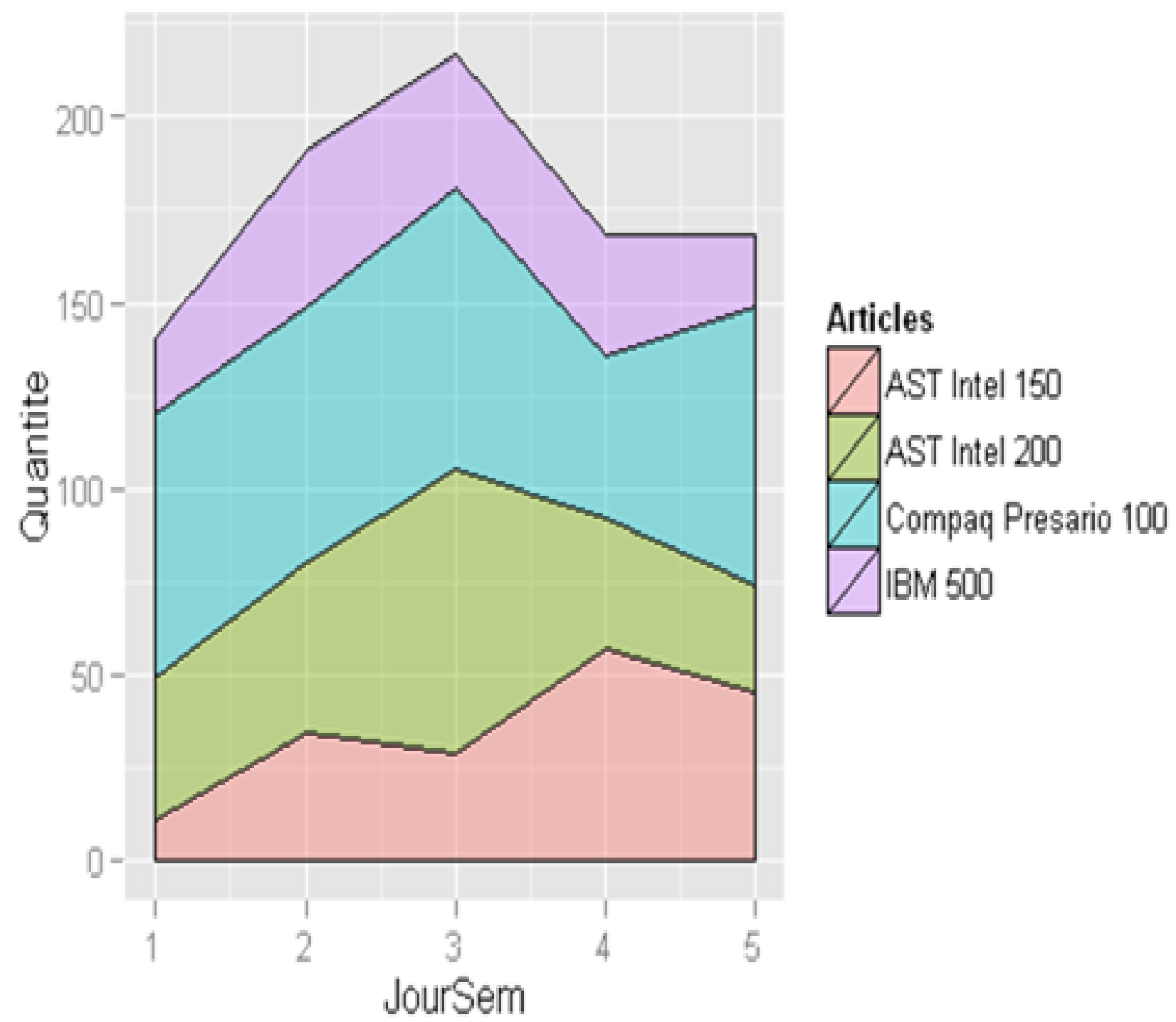
# Correlograms



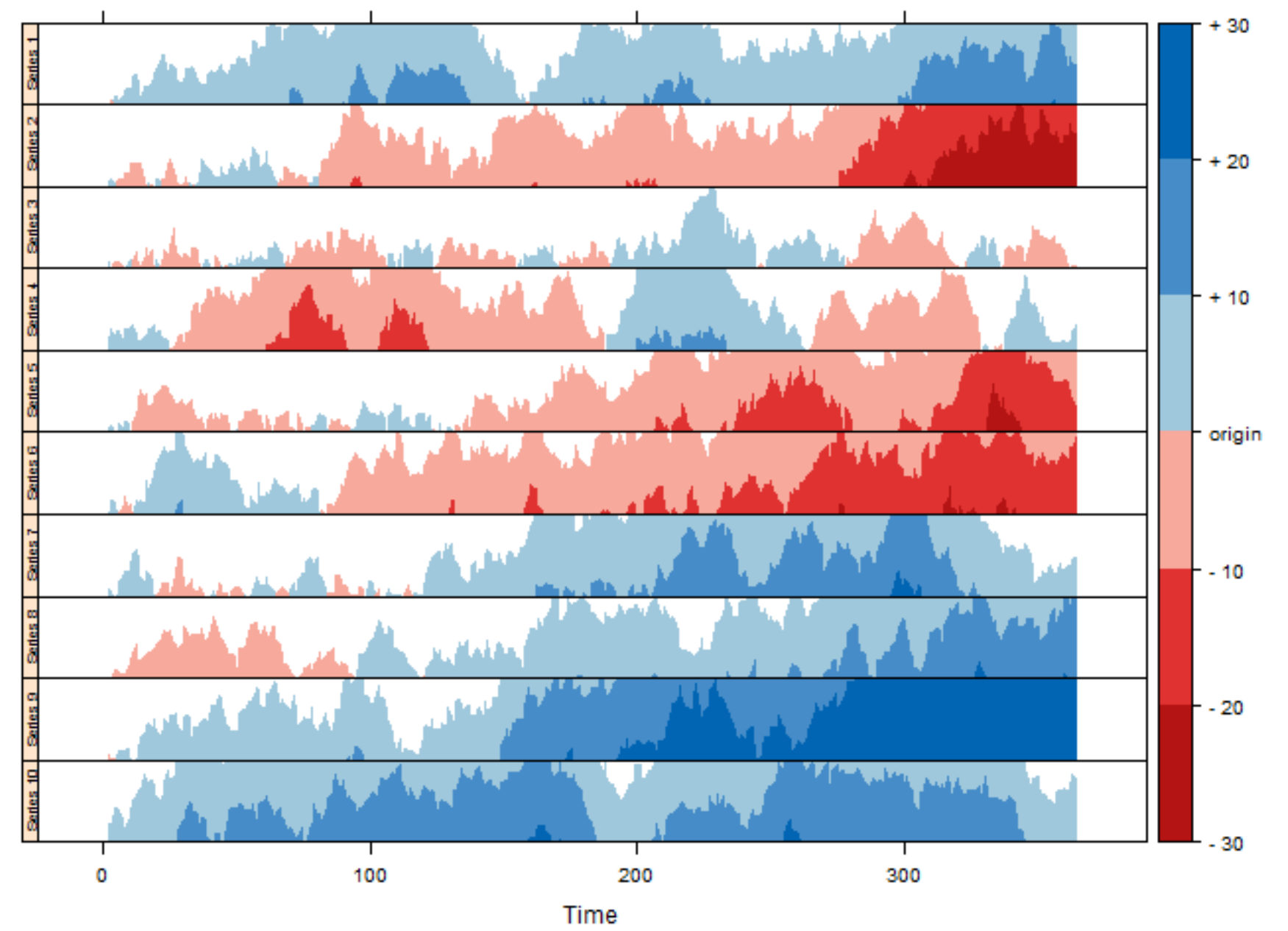
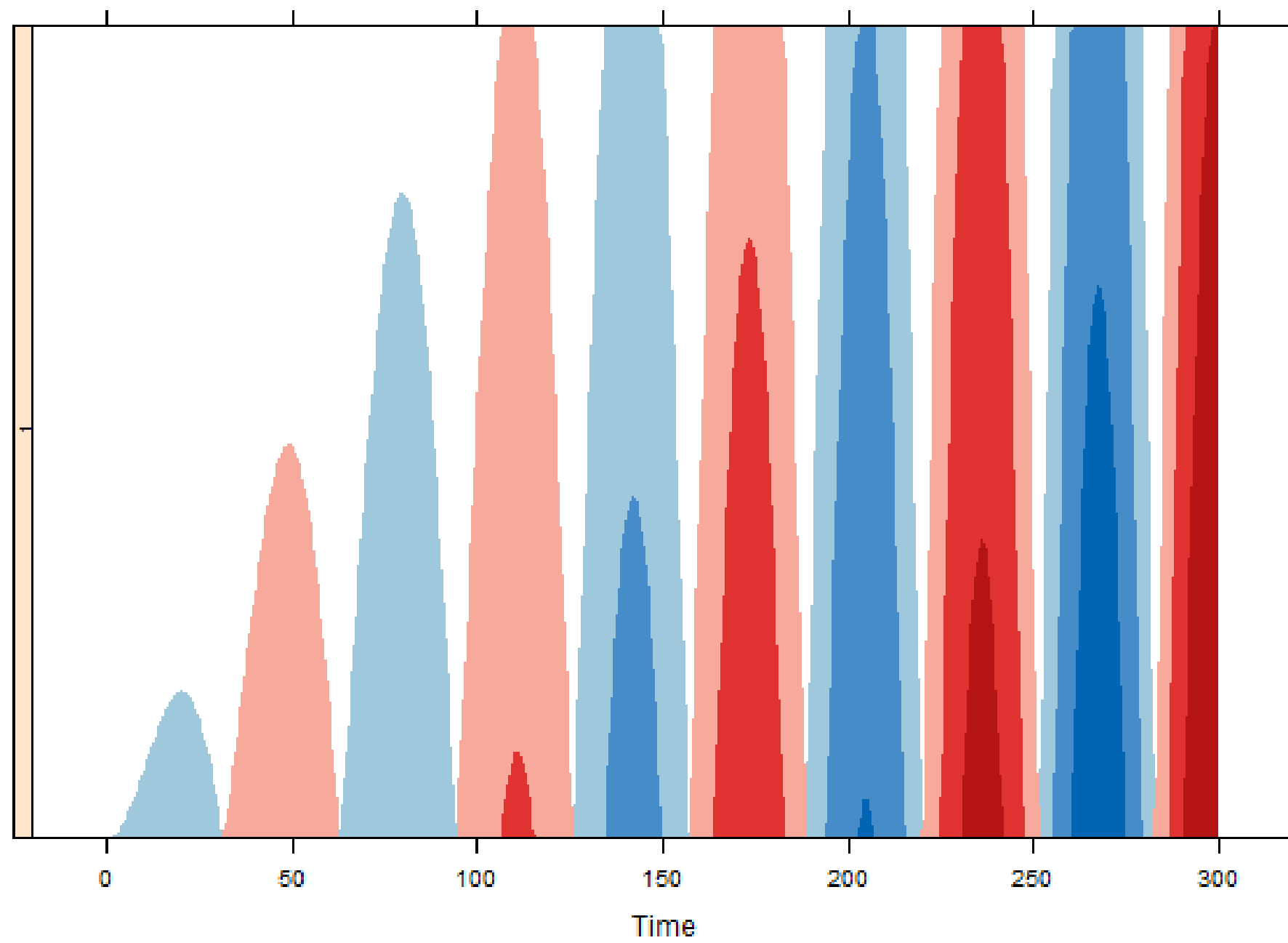


# Area Charts

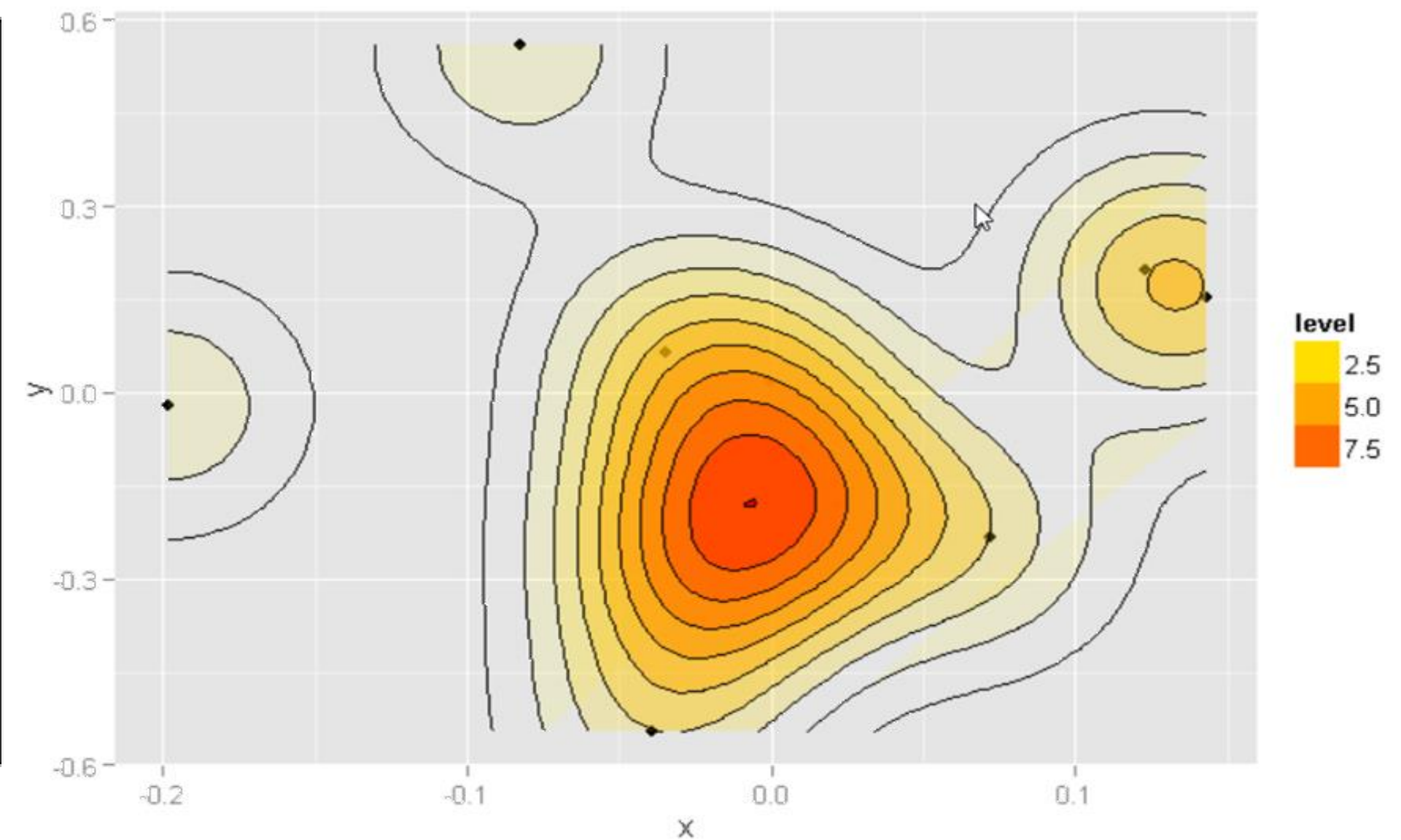
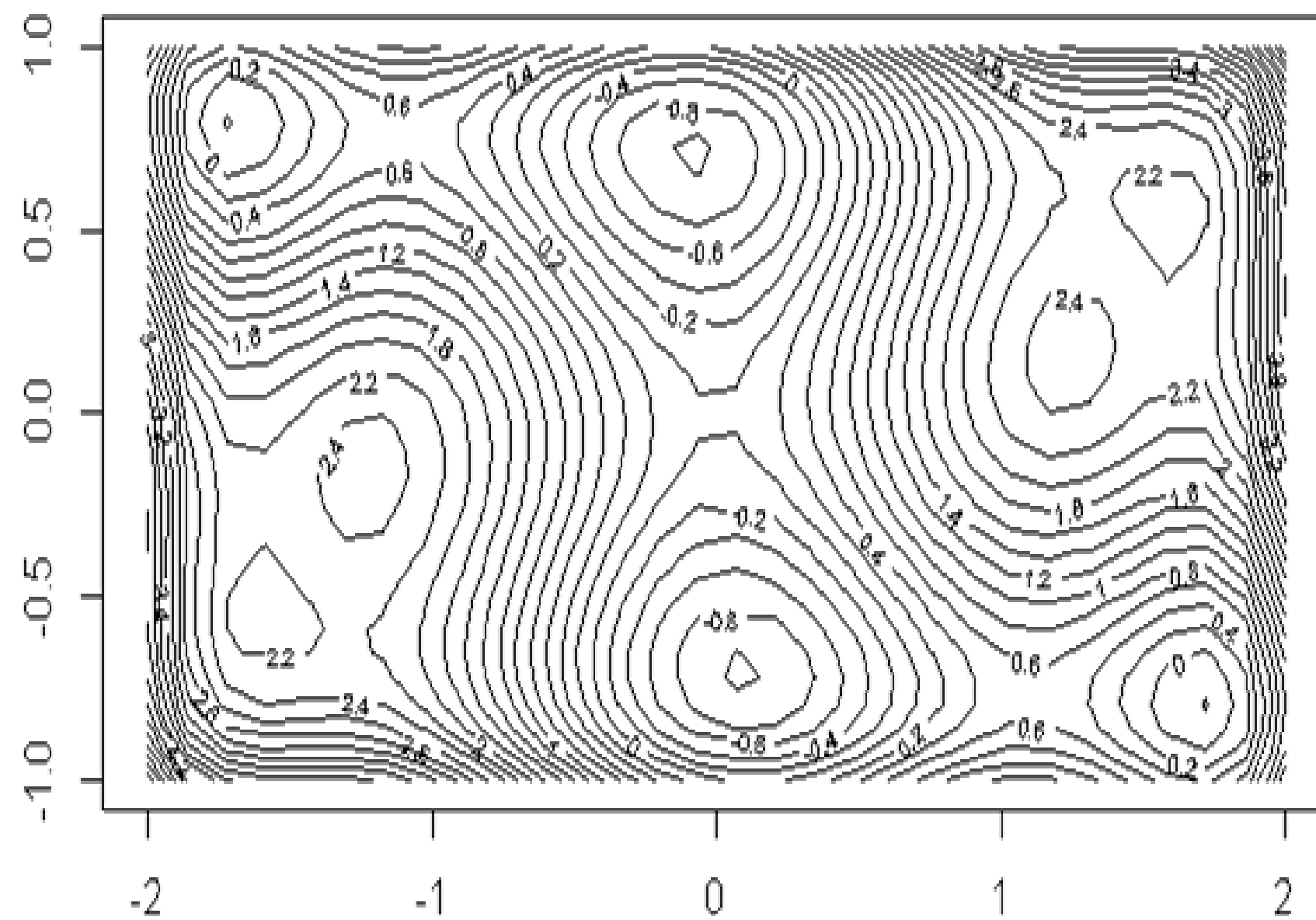
# Stacked areas charts



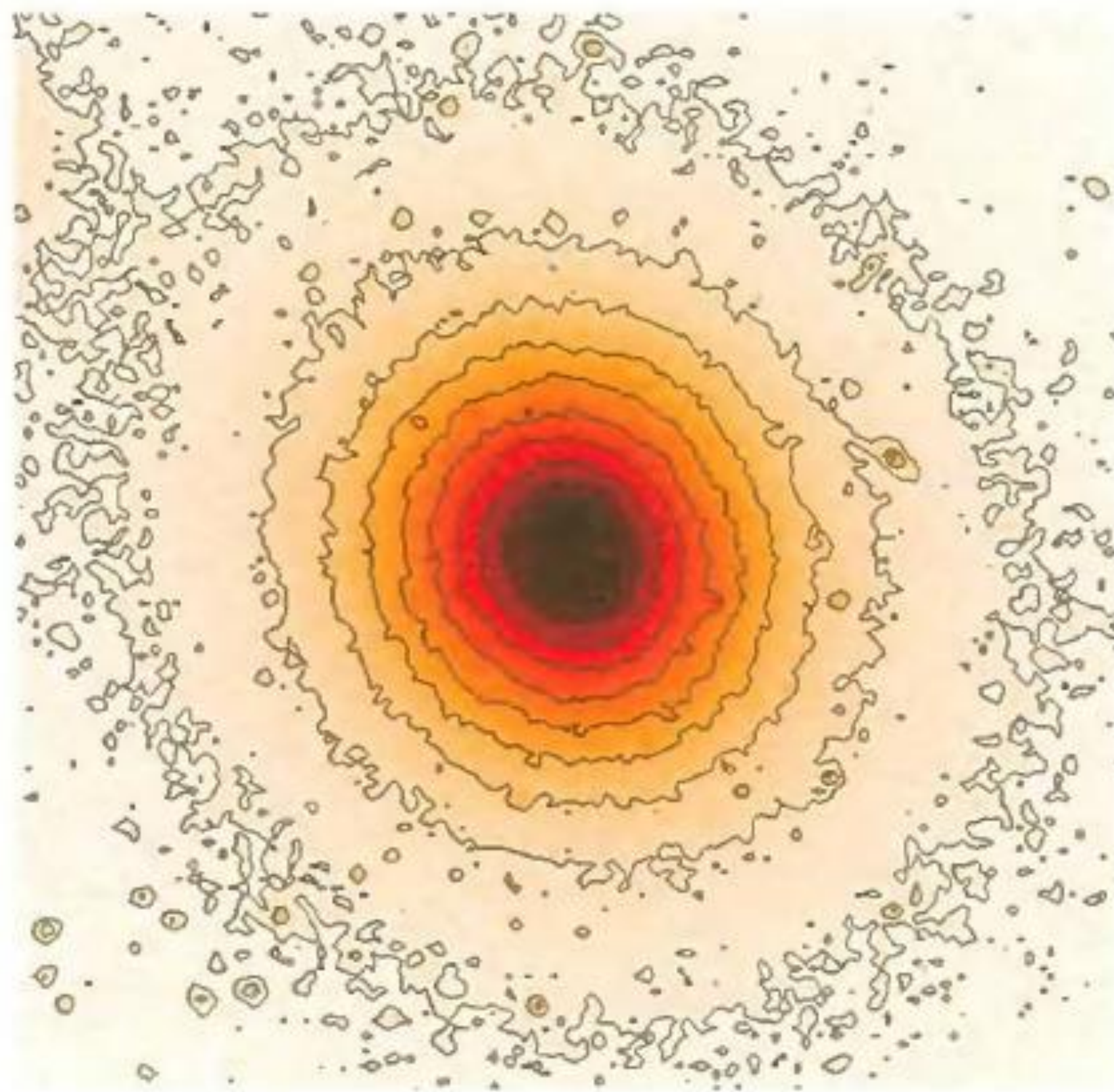
# Stream charts



# Isodensity curves charts

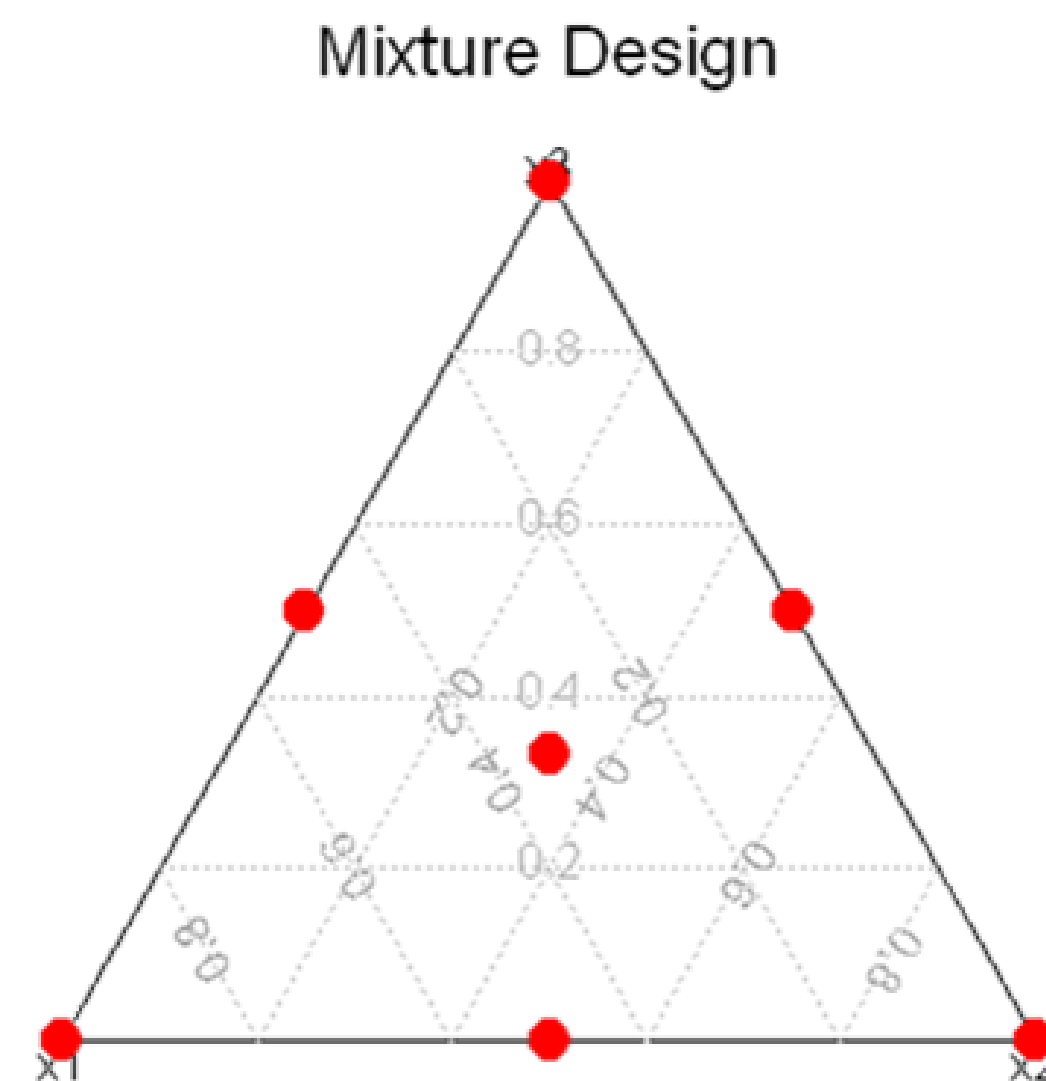
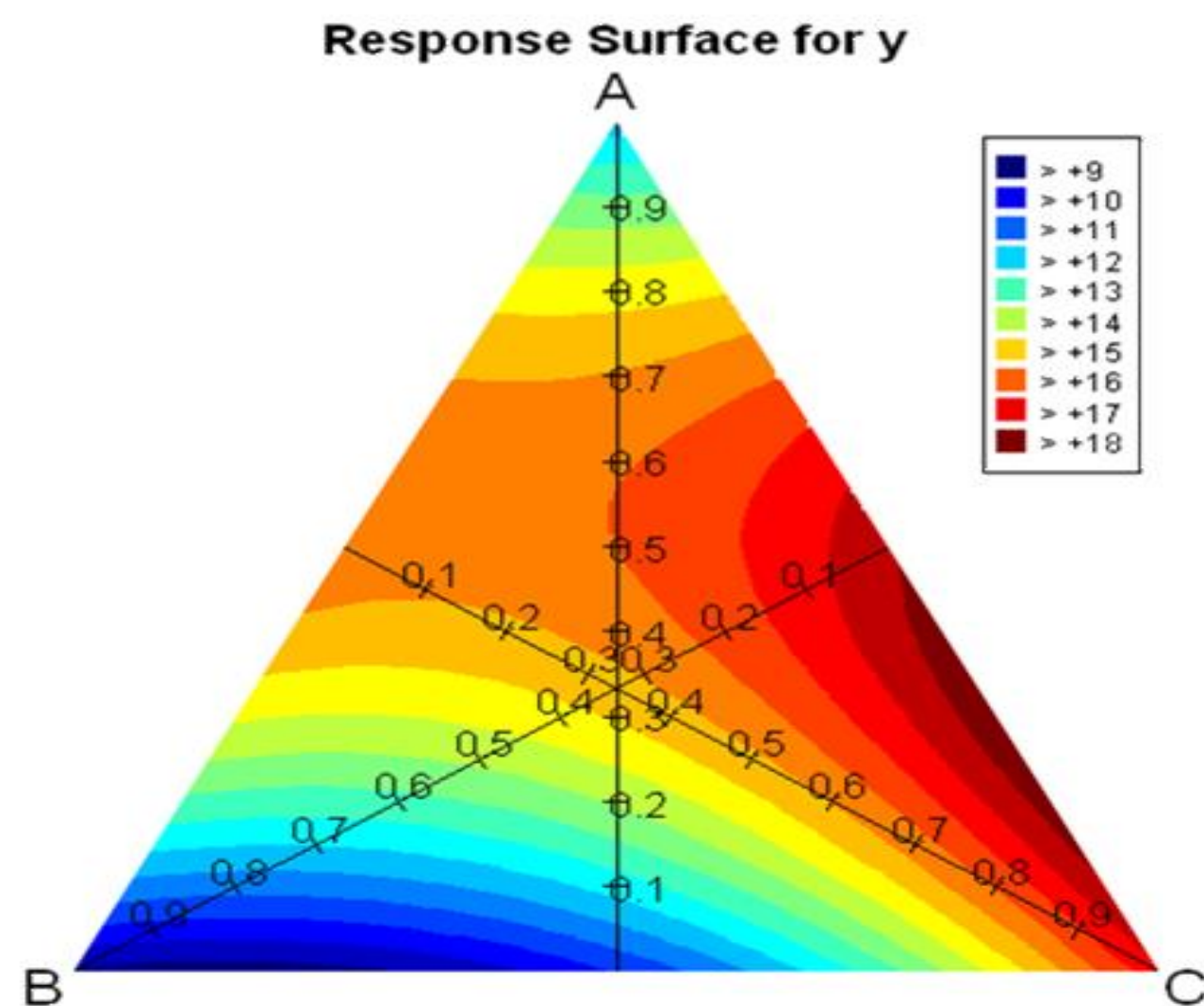


# Isophotal charts

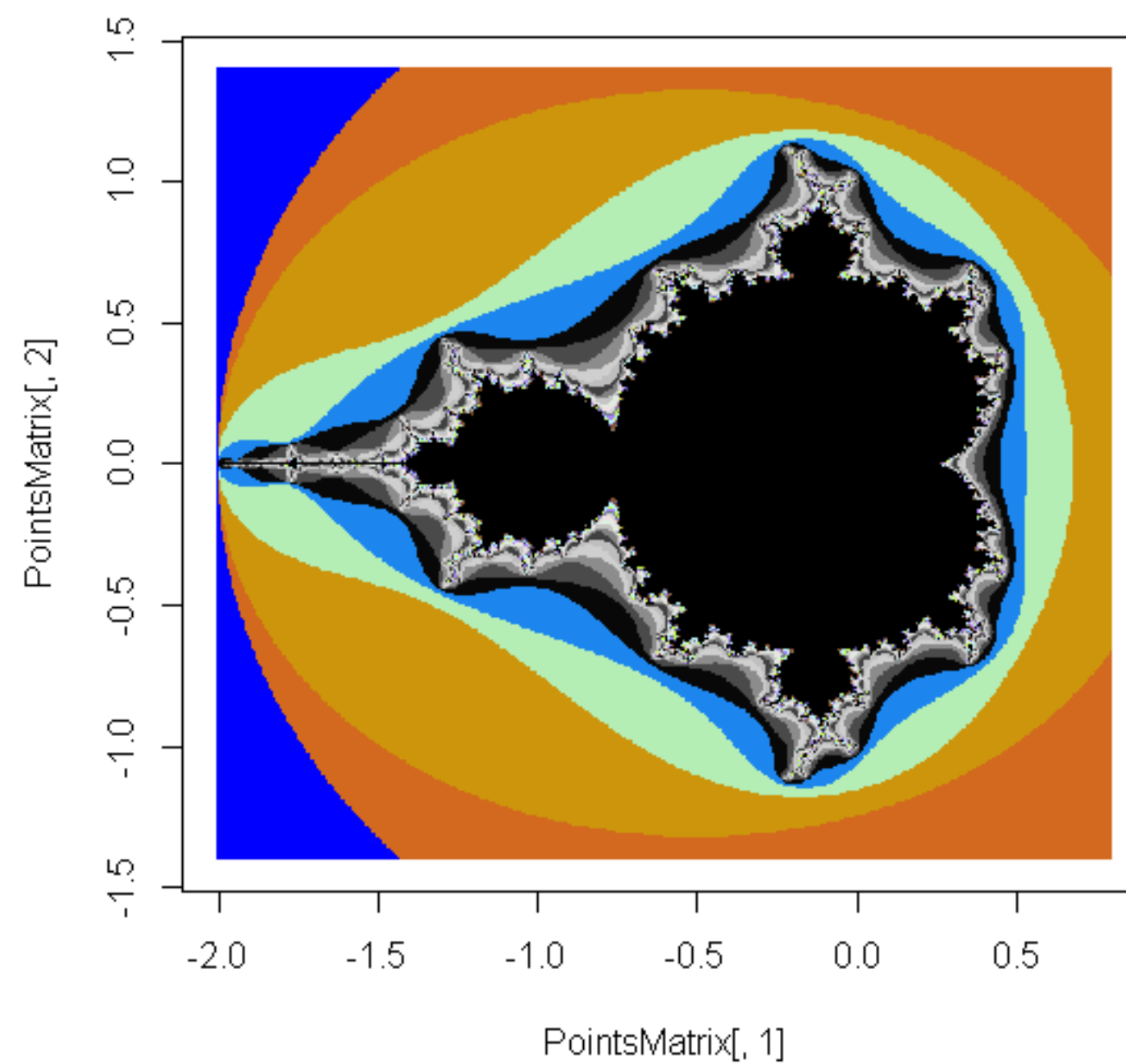




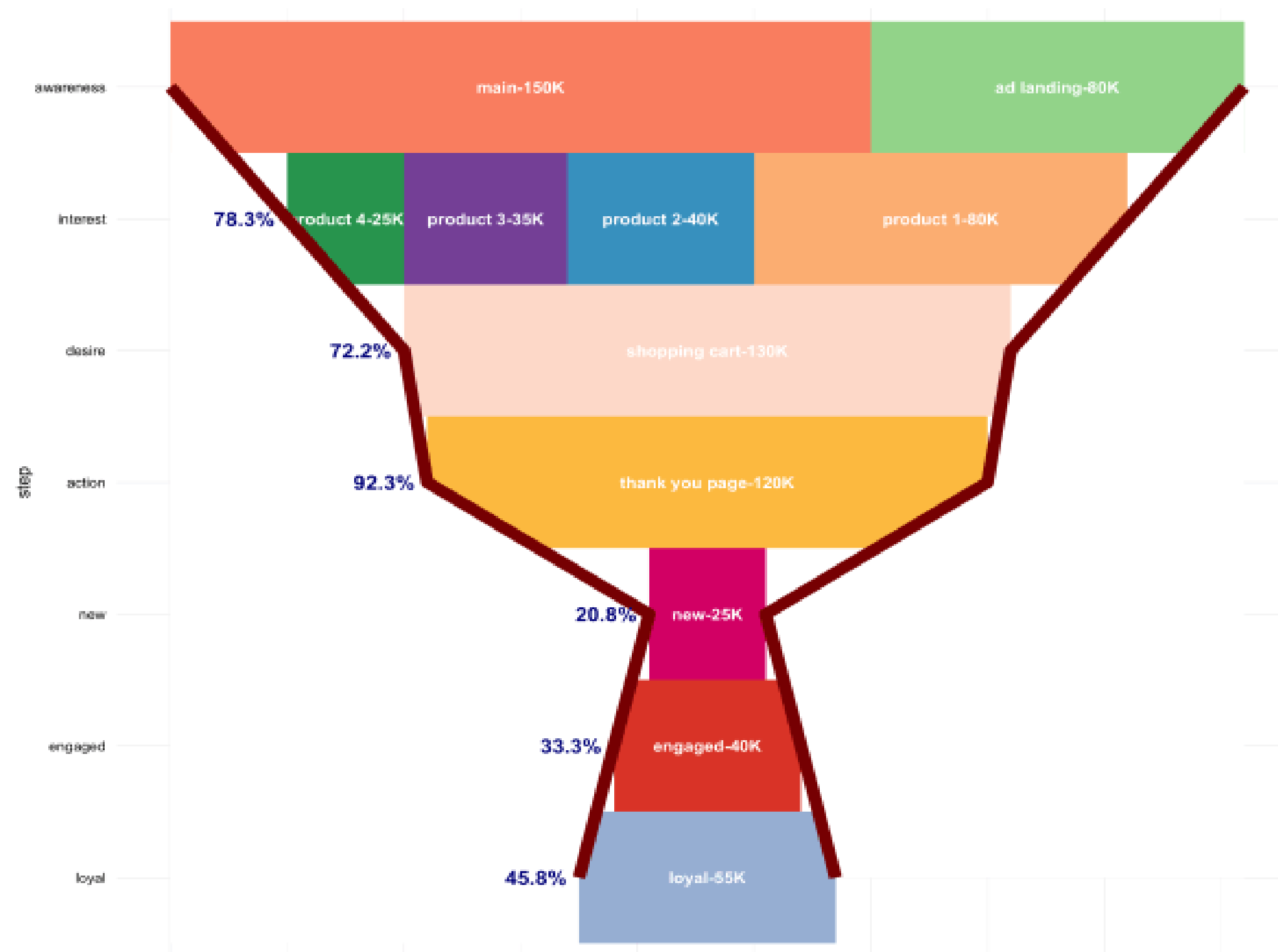
# Ternary charts (mixtures charts)



## Fractals charts (plot chart in fact...)



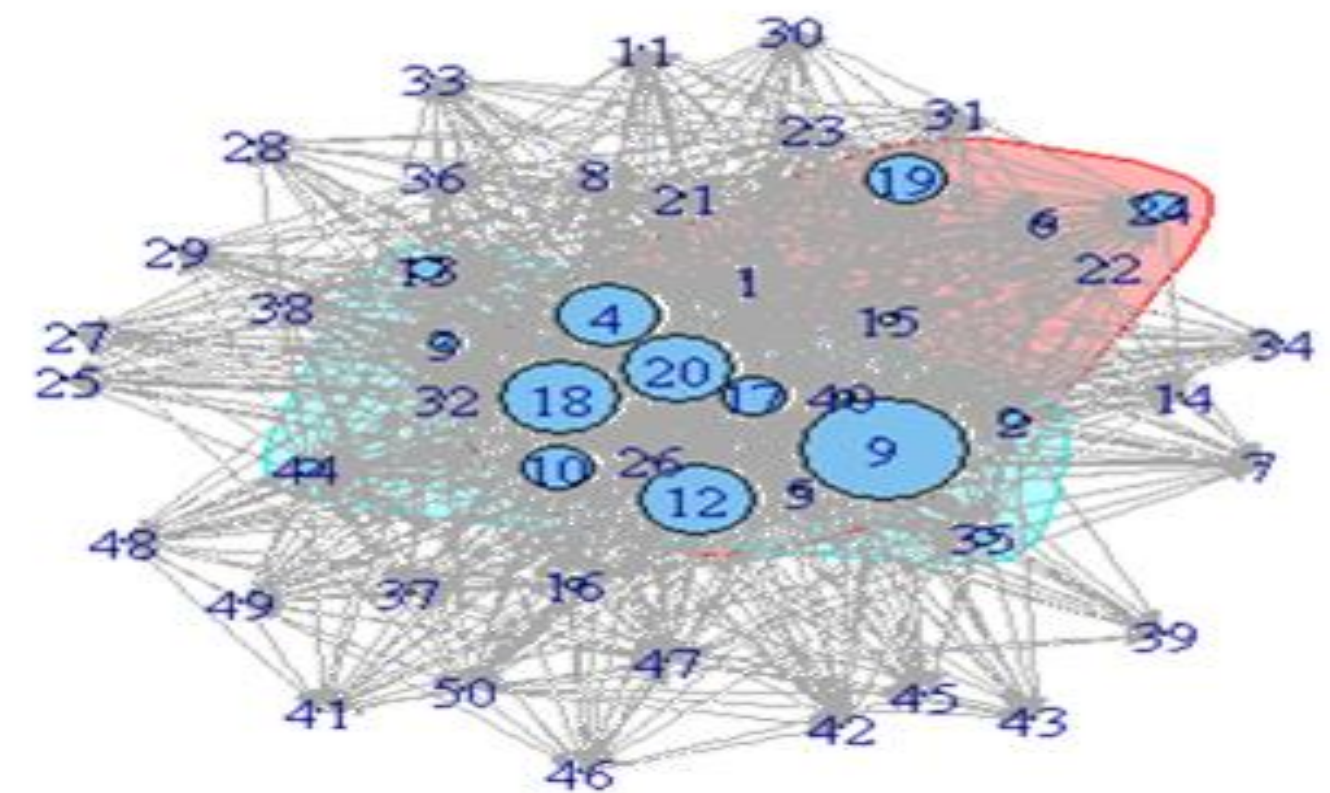
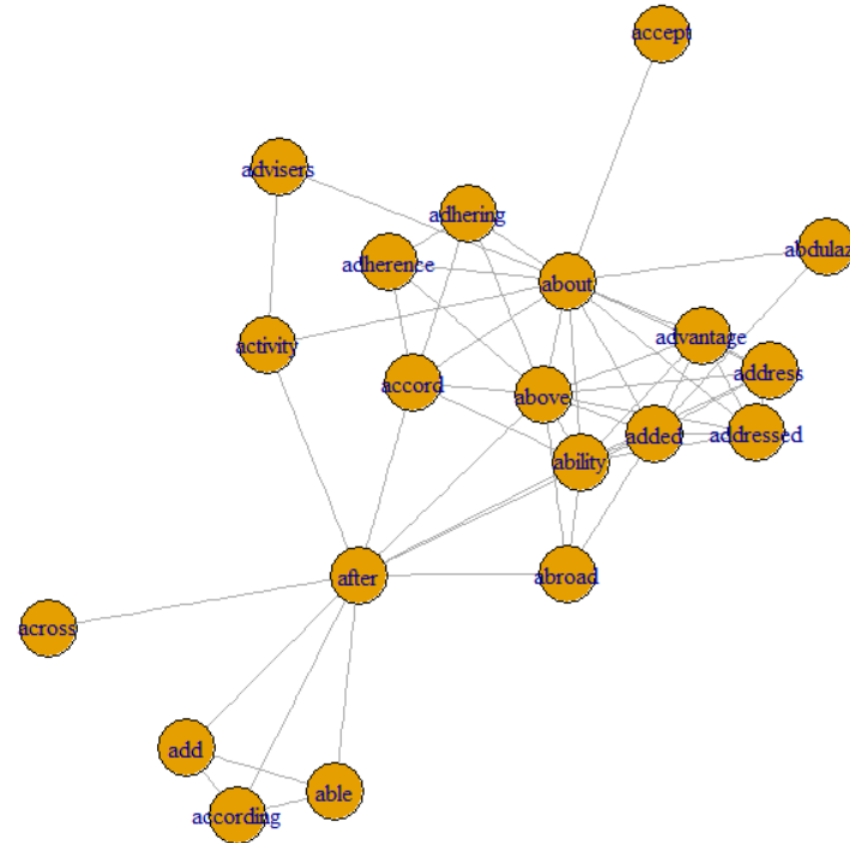
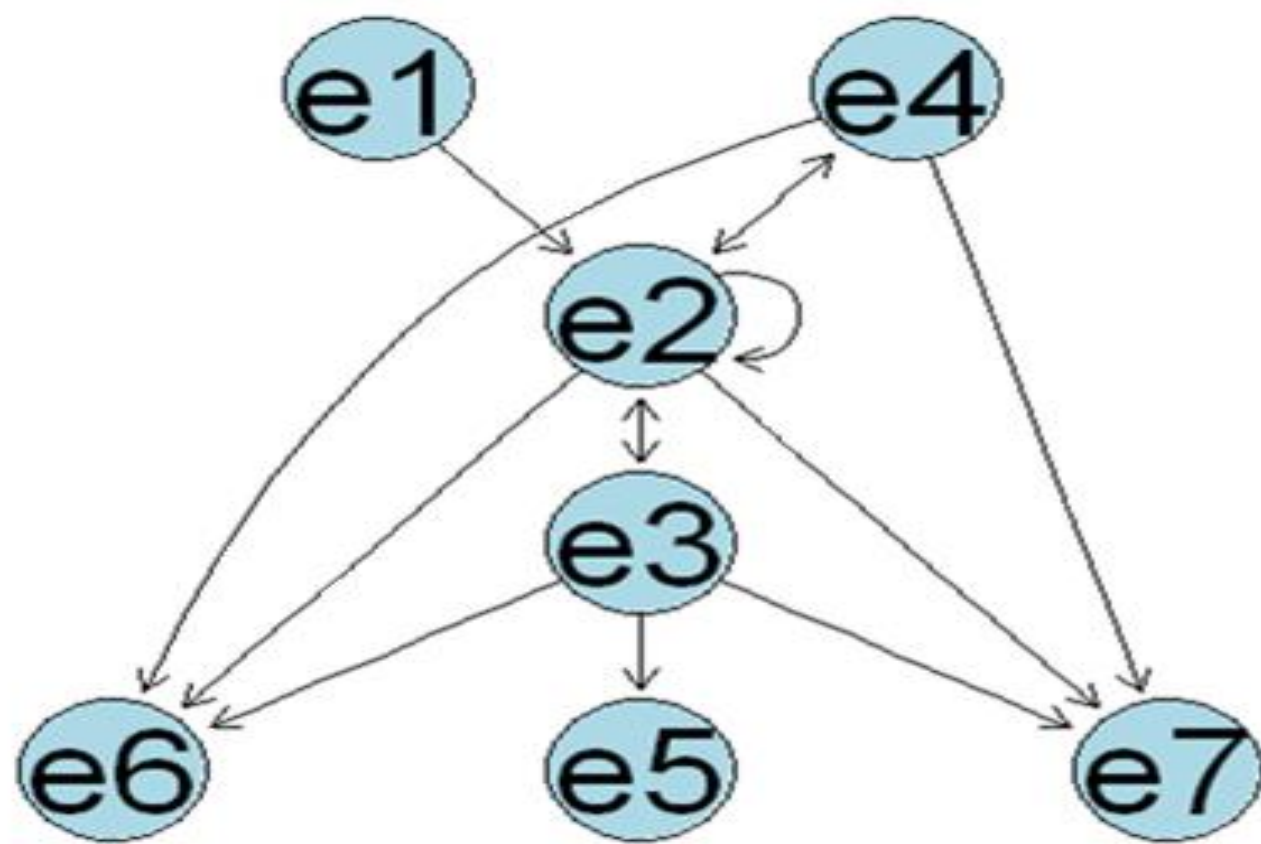
# Funnel chart



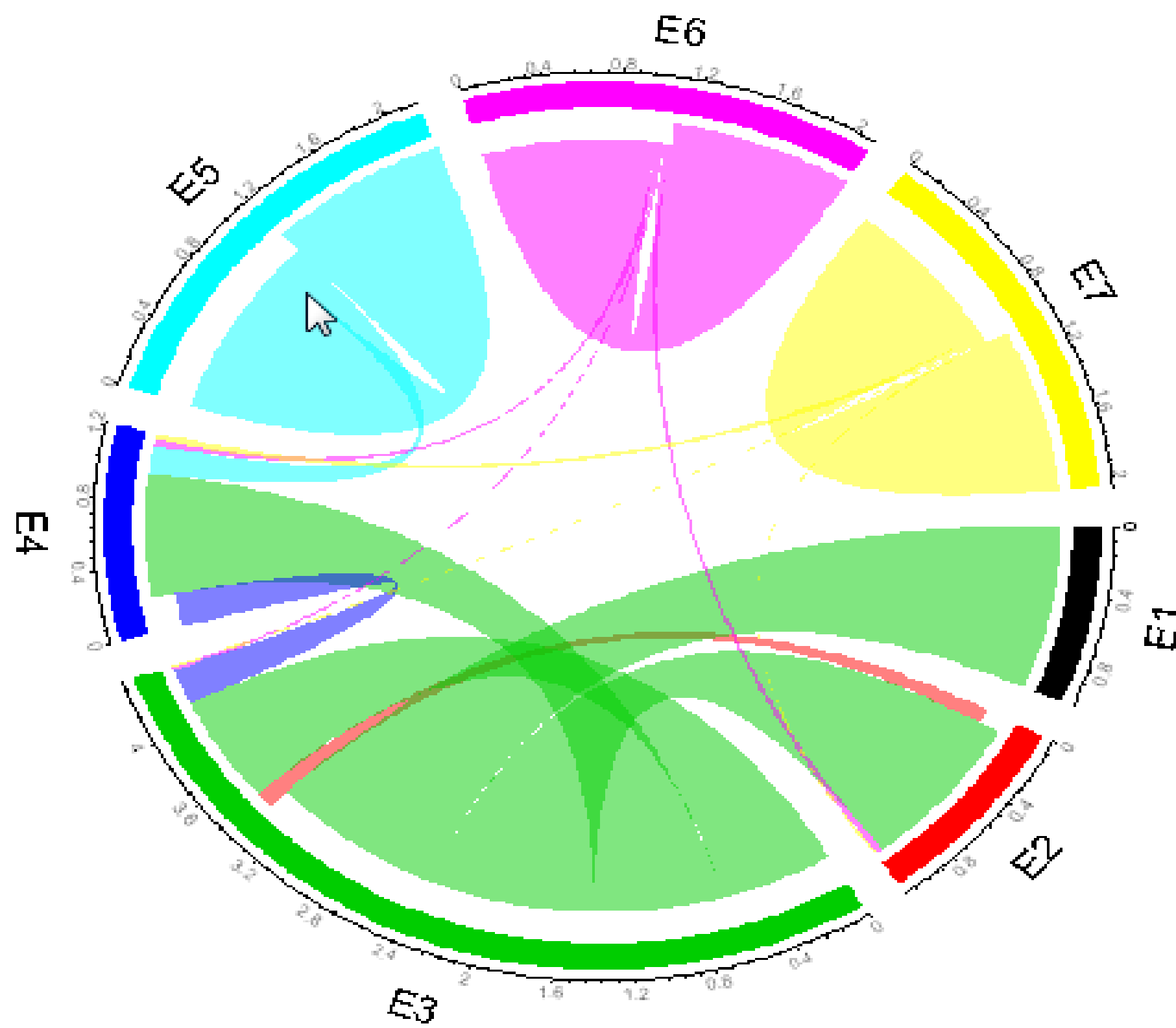


# Link/Flow Charts

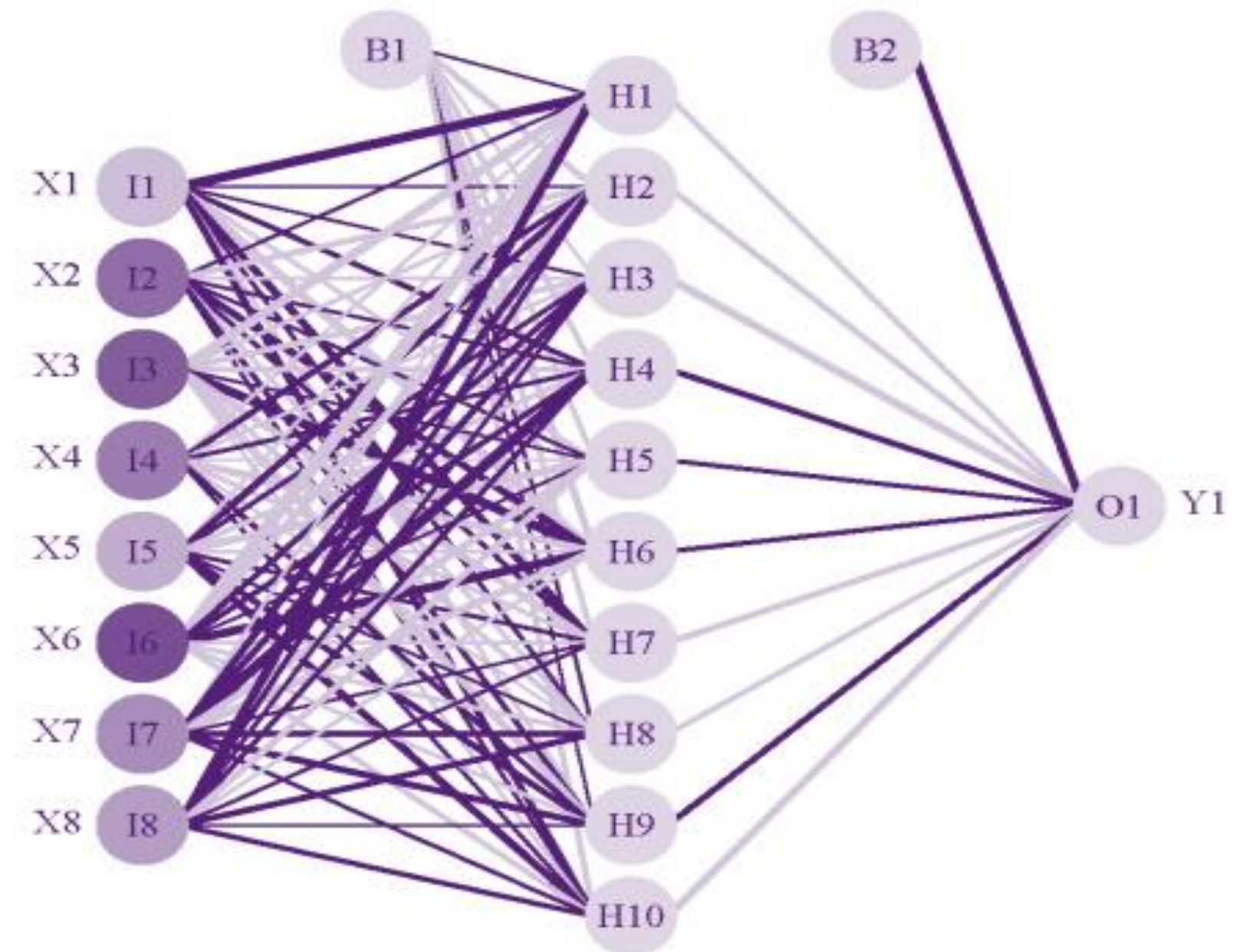
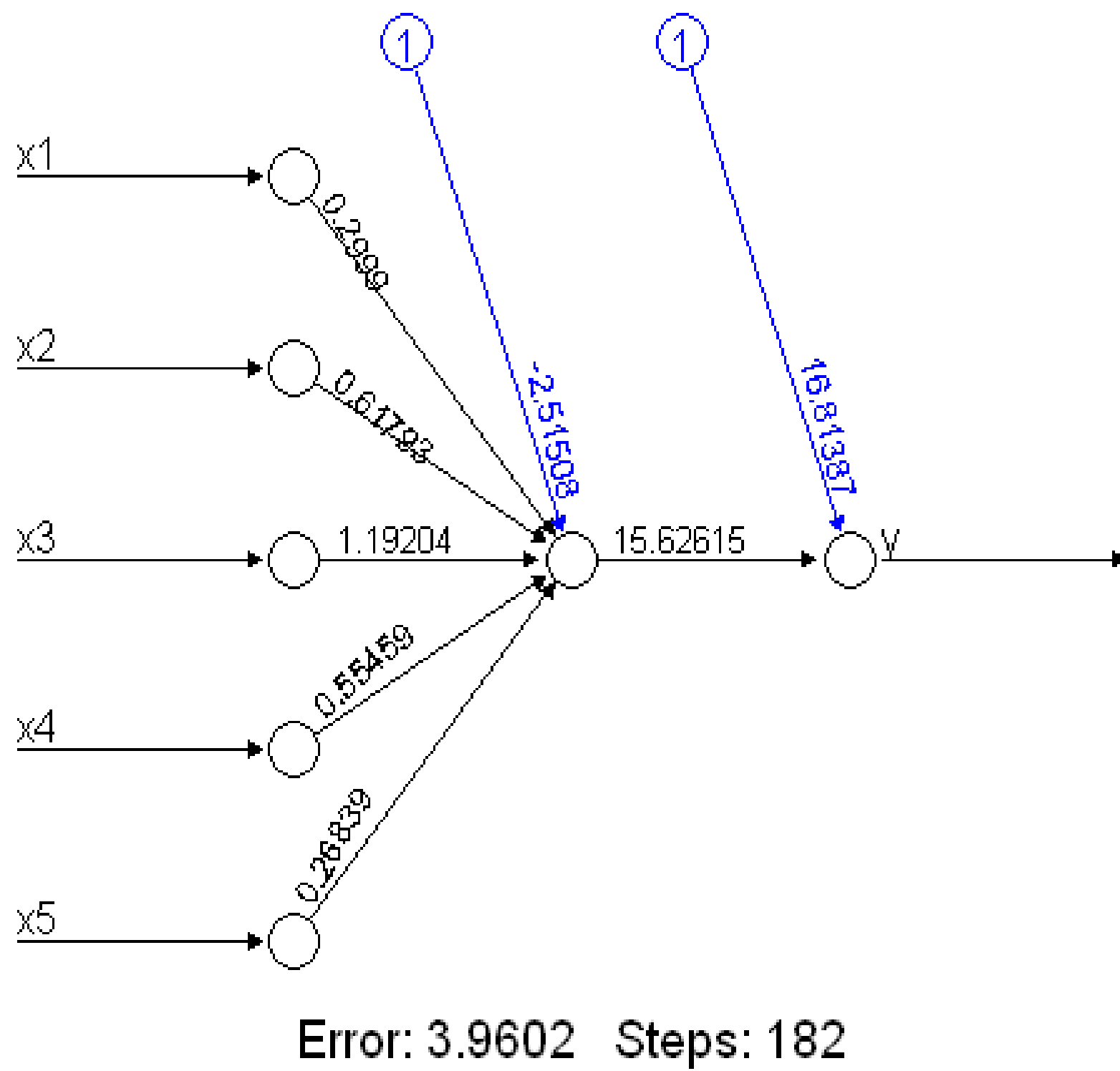
# Networks or Graphs charts



# Chord diagram

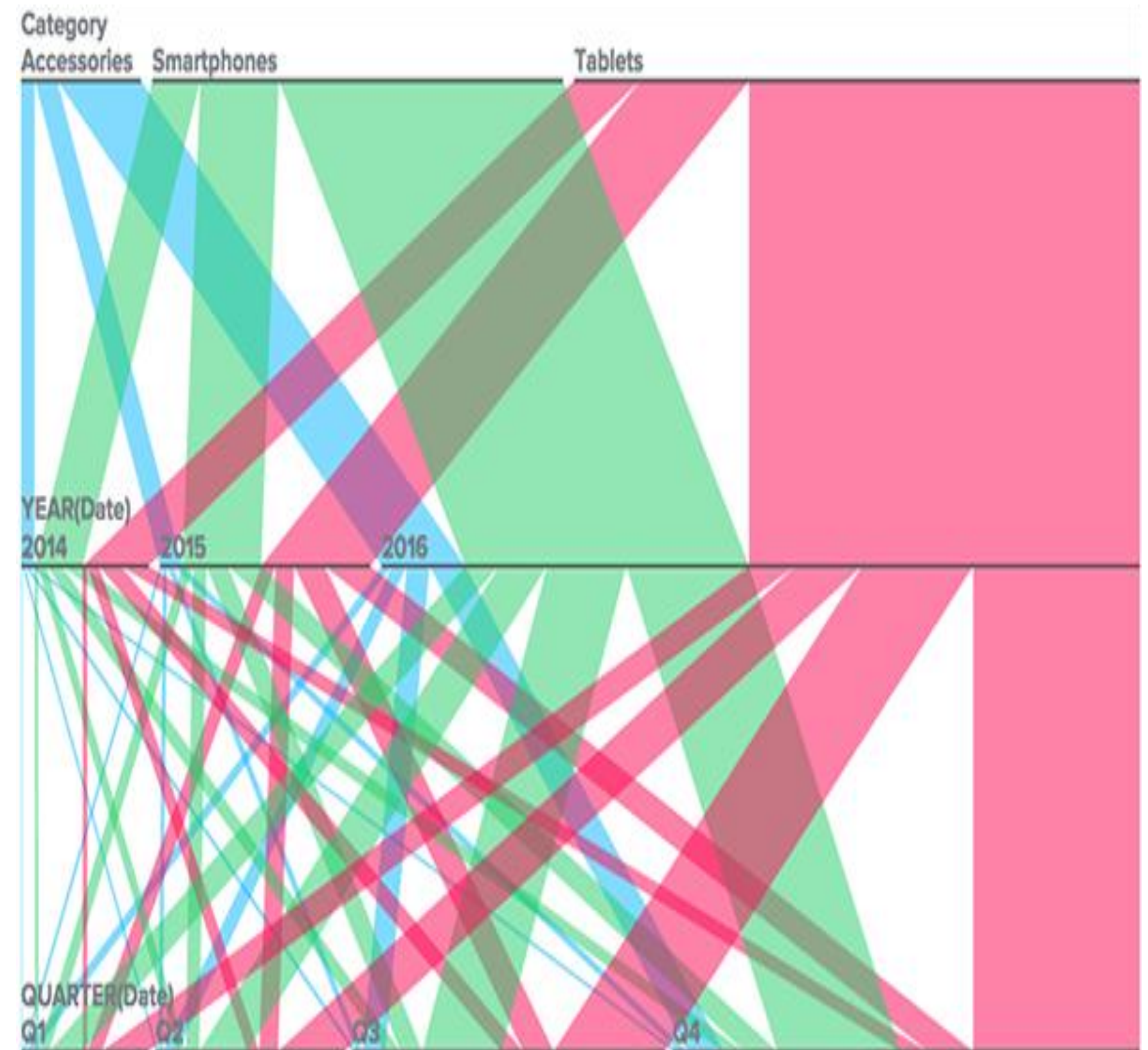
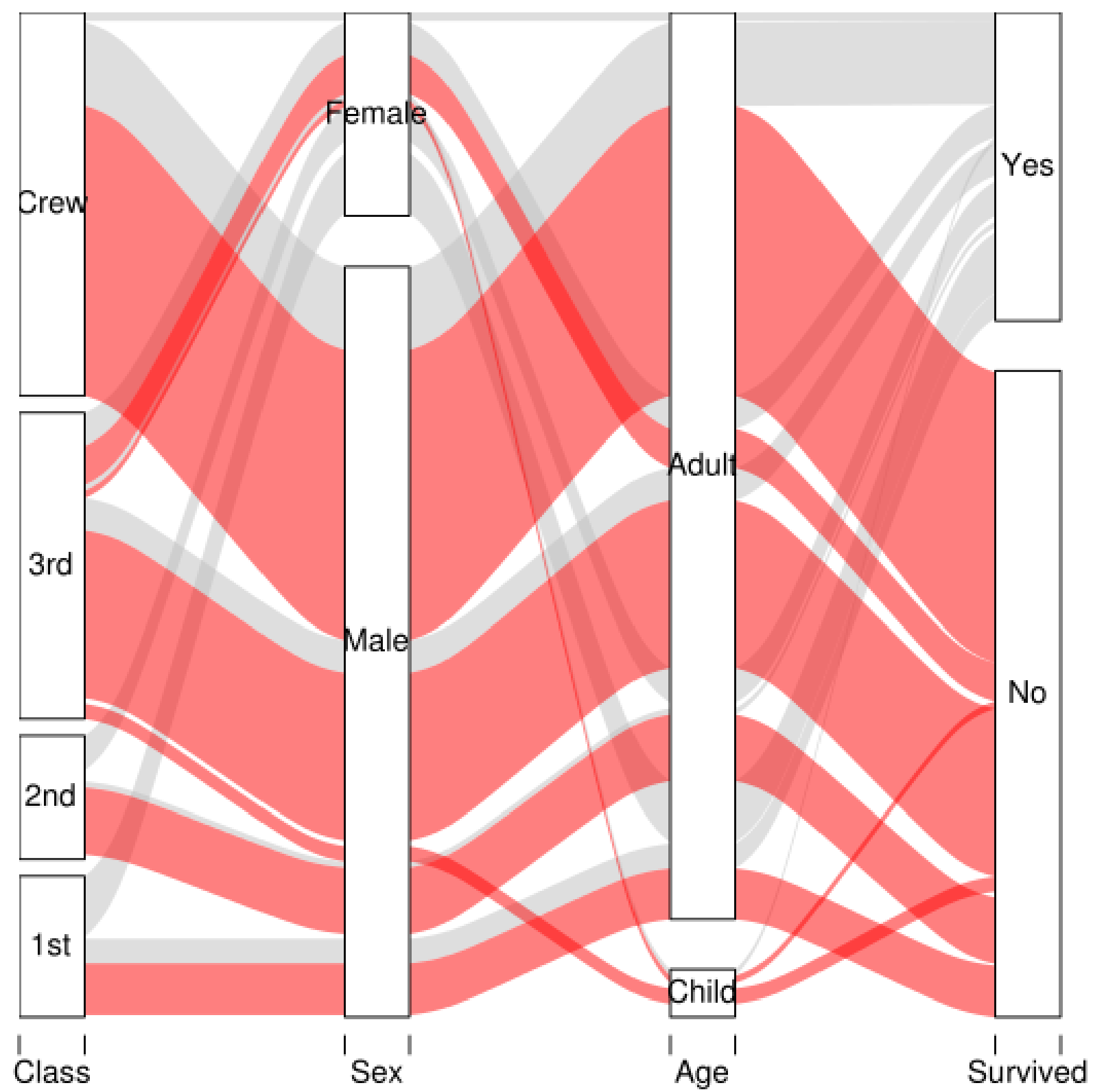


# Neural Network

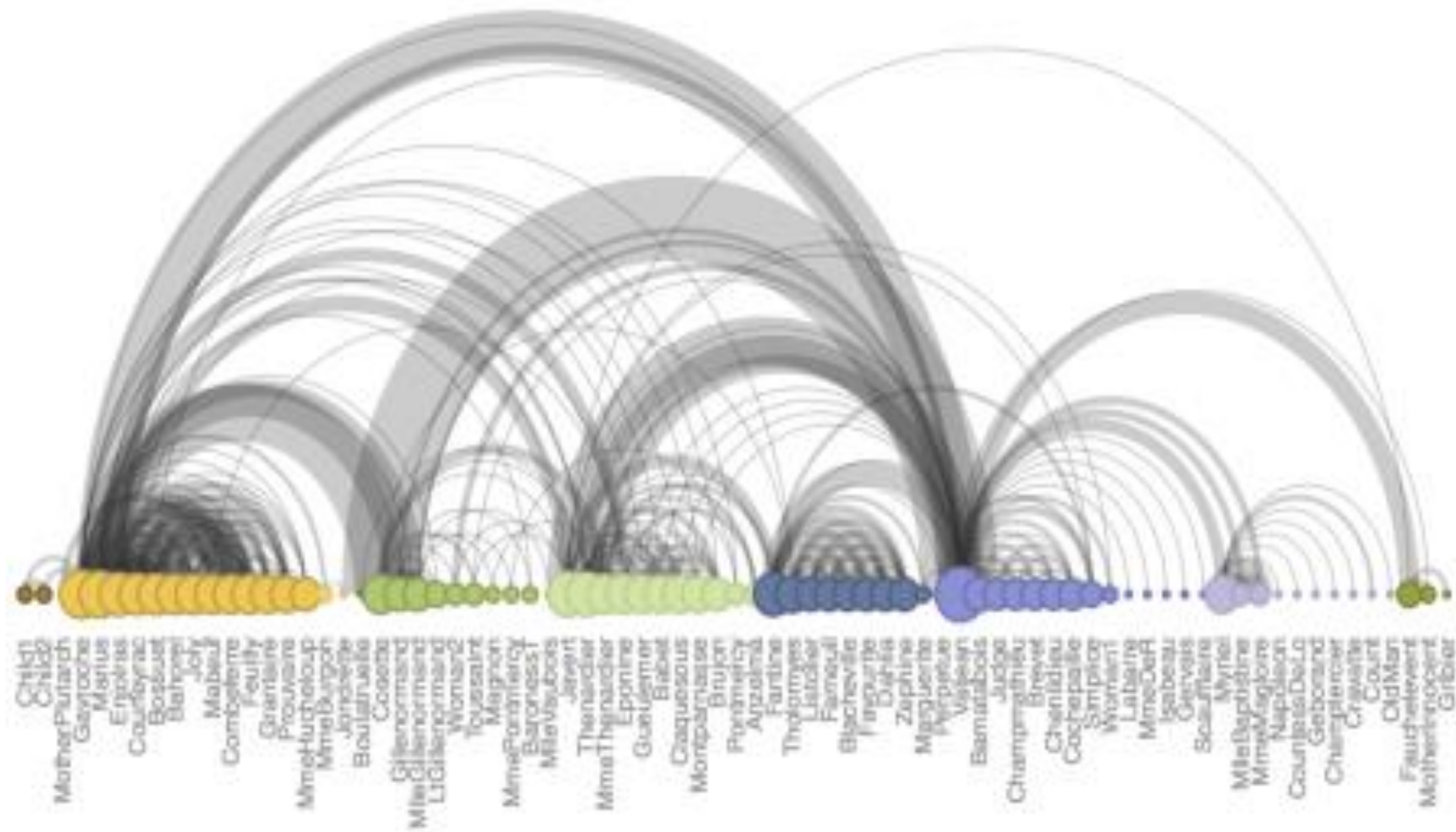




# Parallel coordinates charts (Sankey)

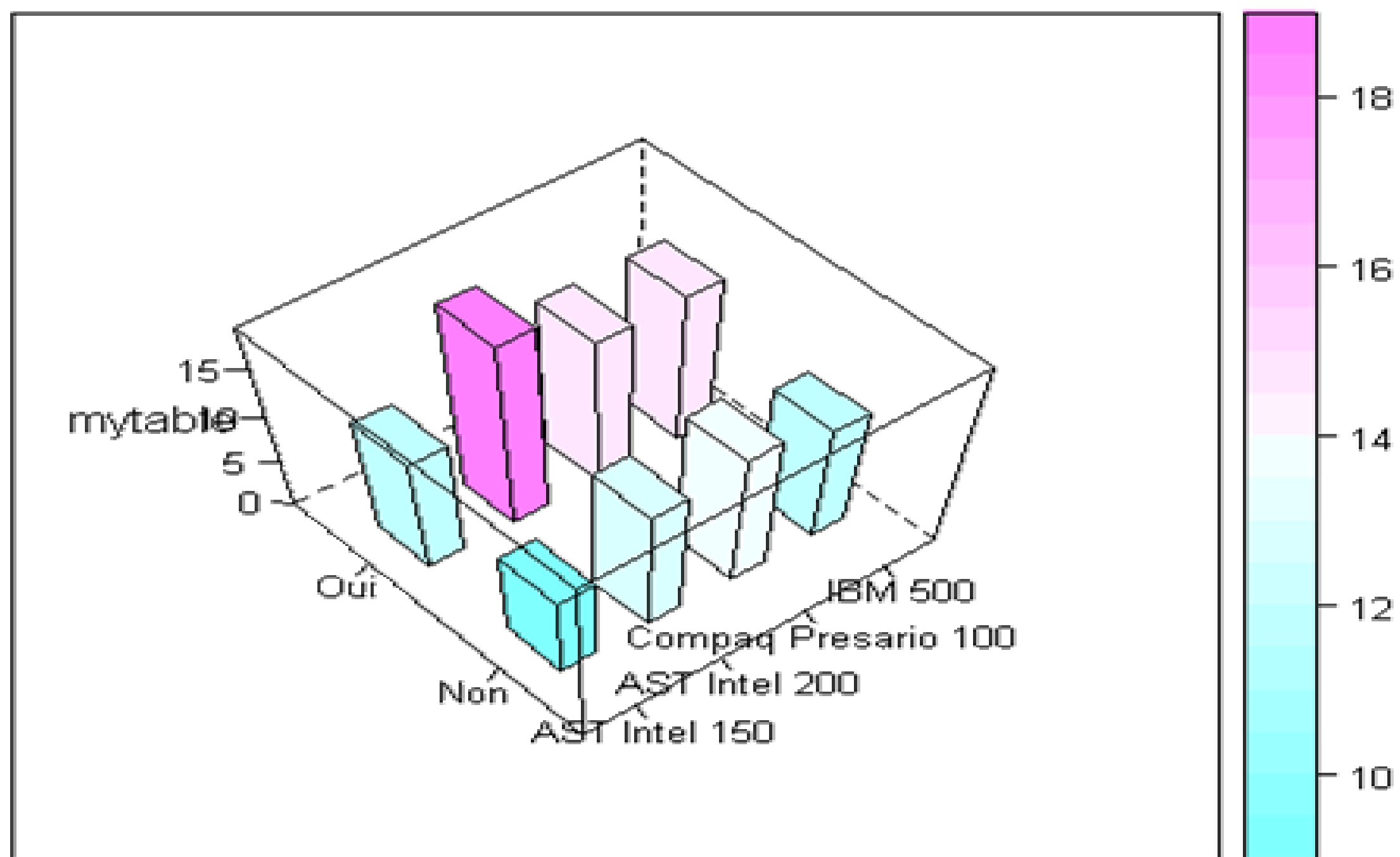


# Arc-connection chart



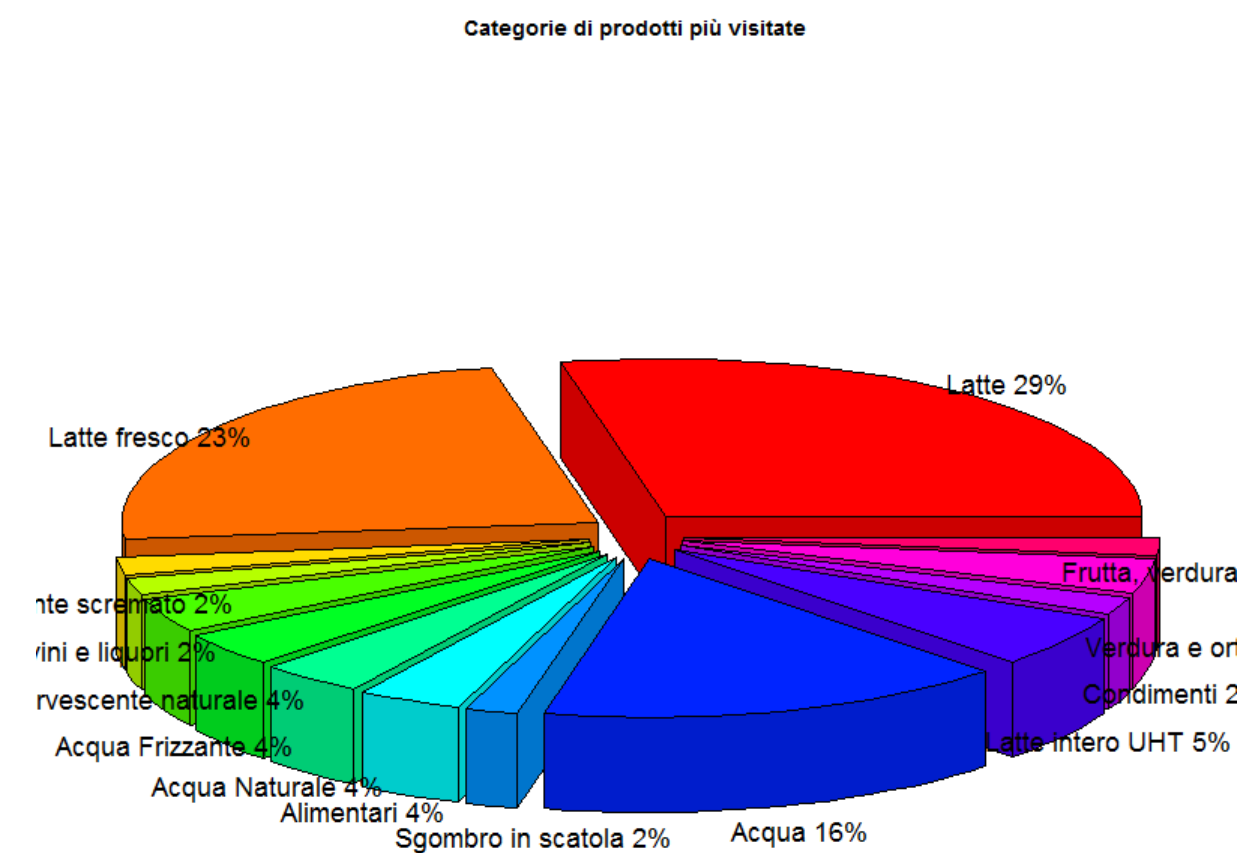
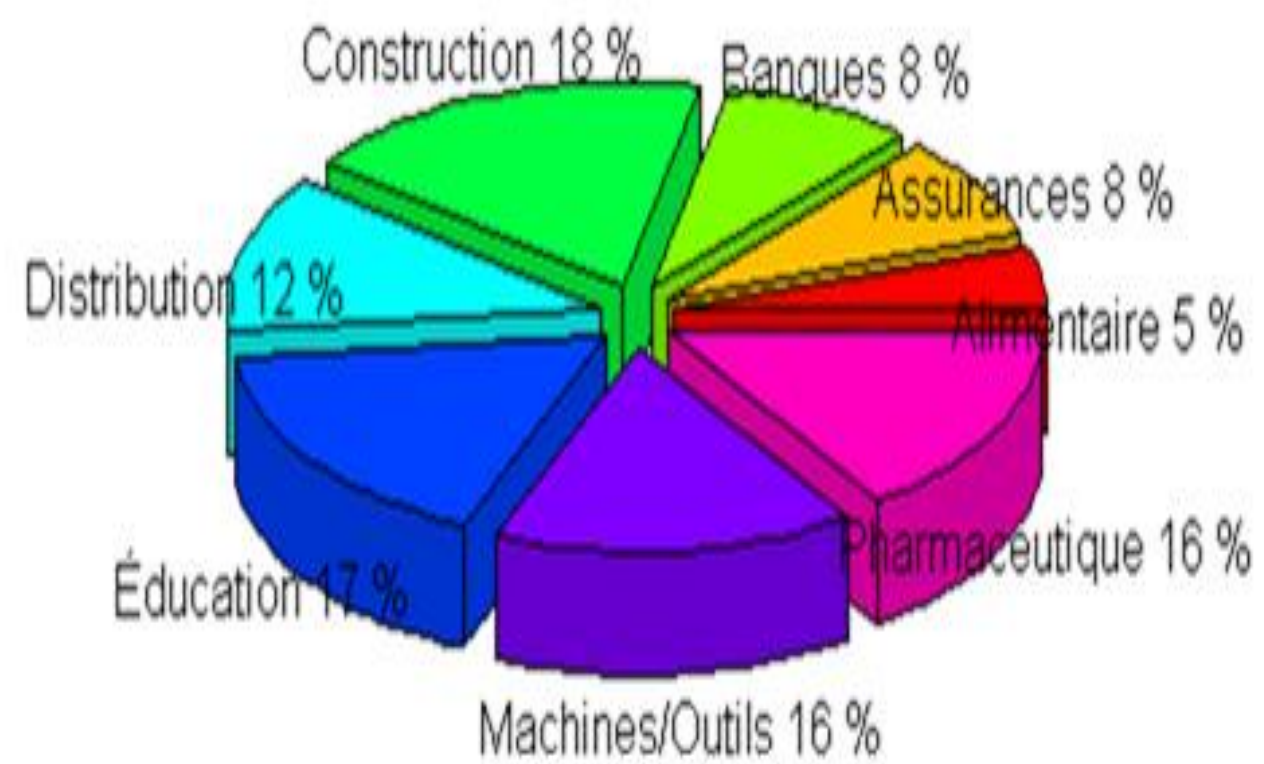
# 3D Charts

## 3D Bar chart

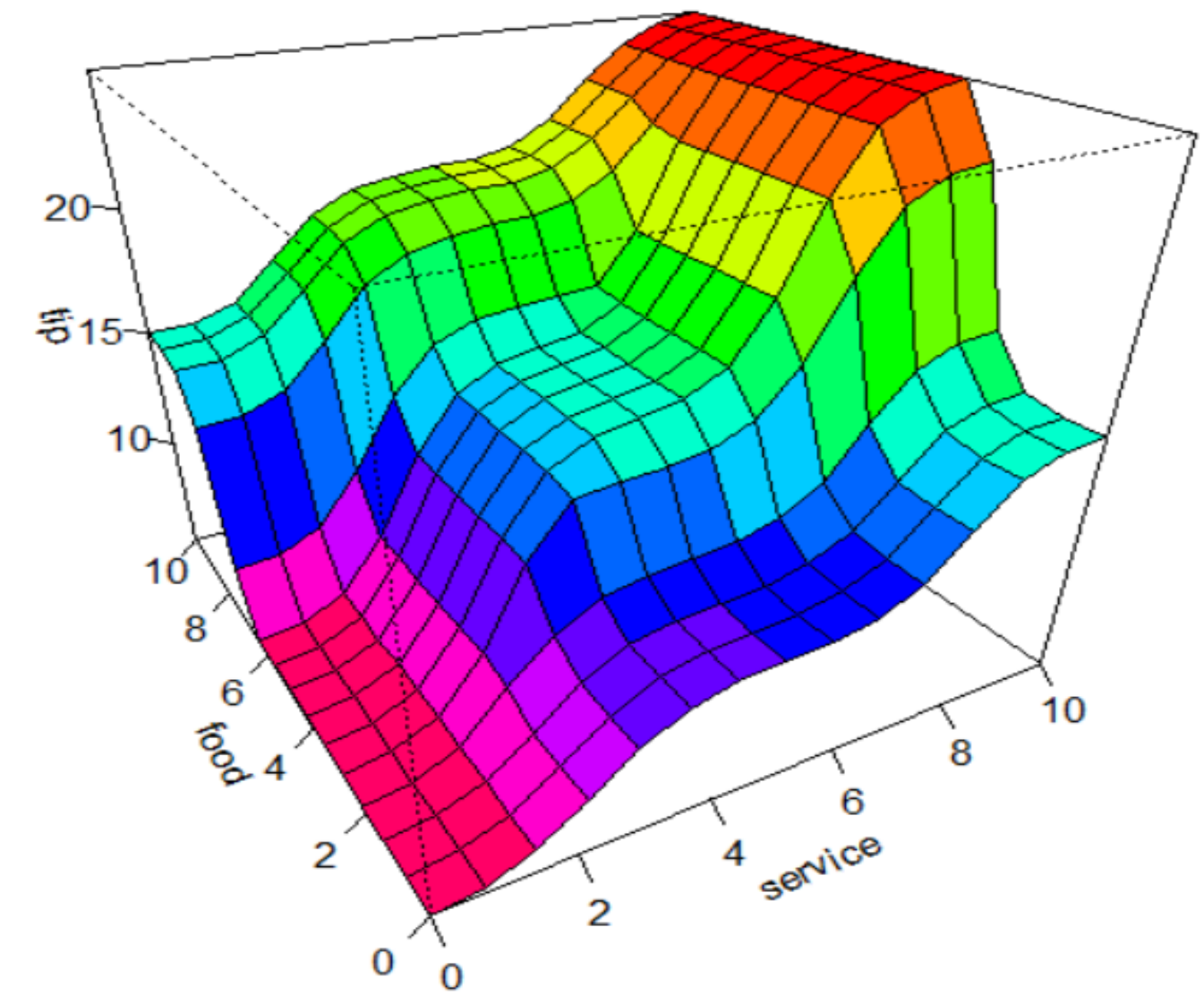
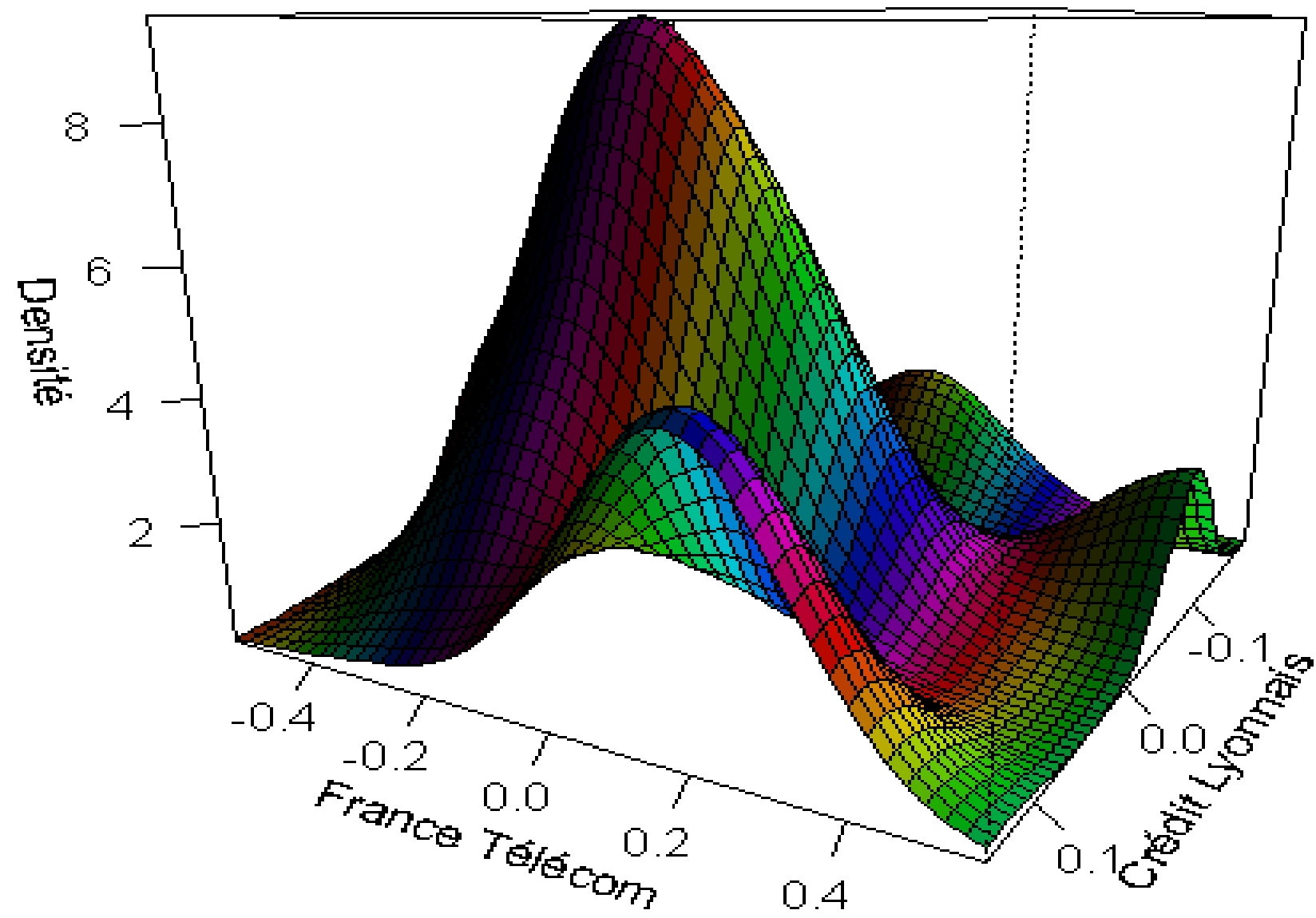




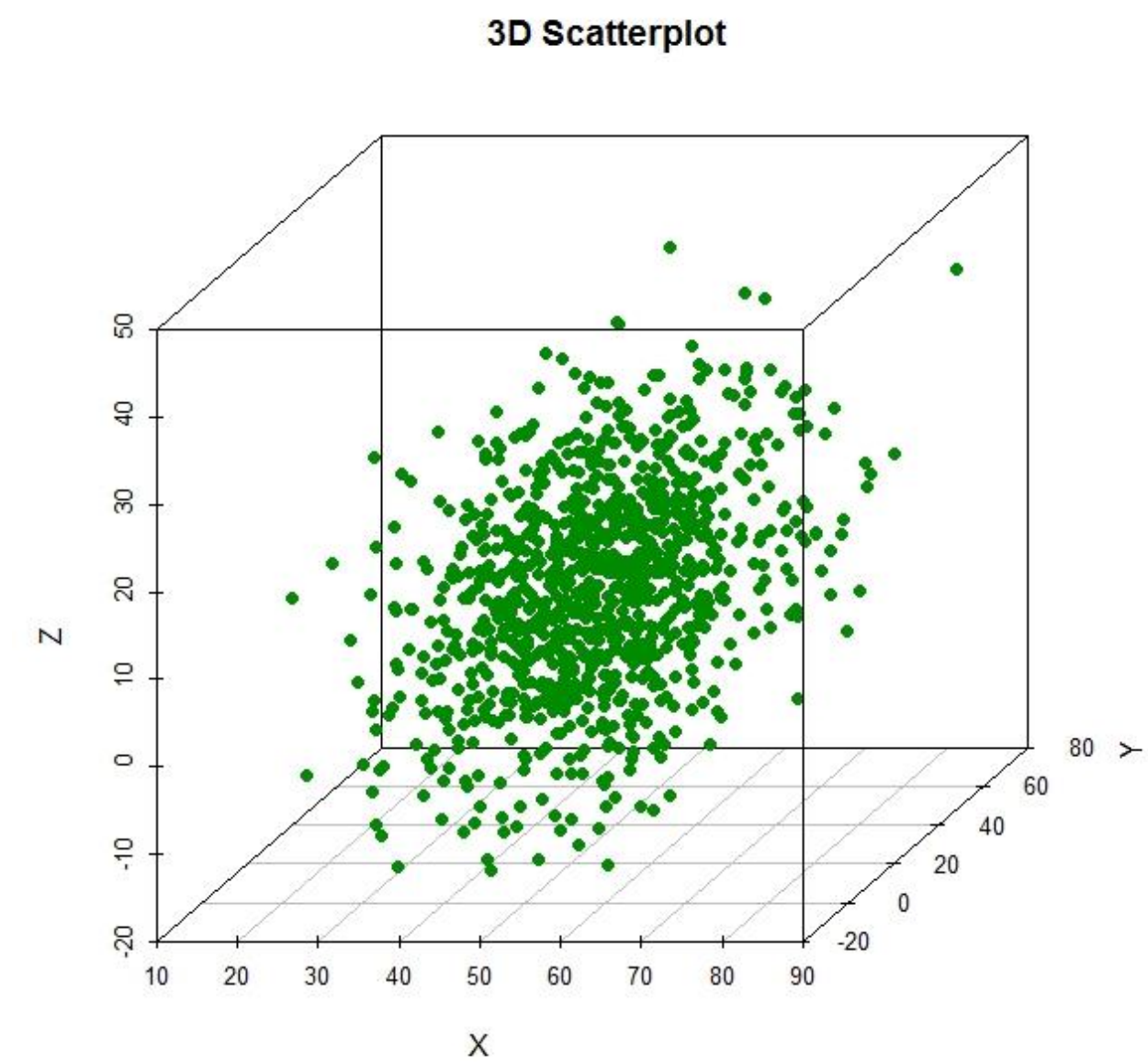
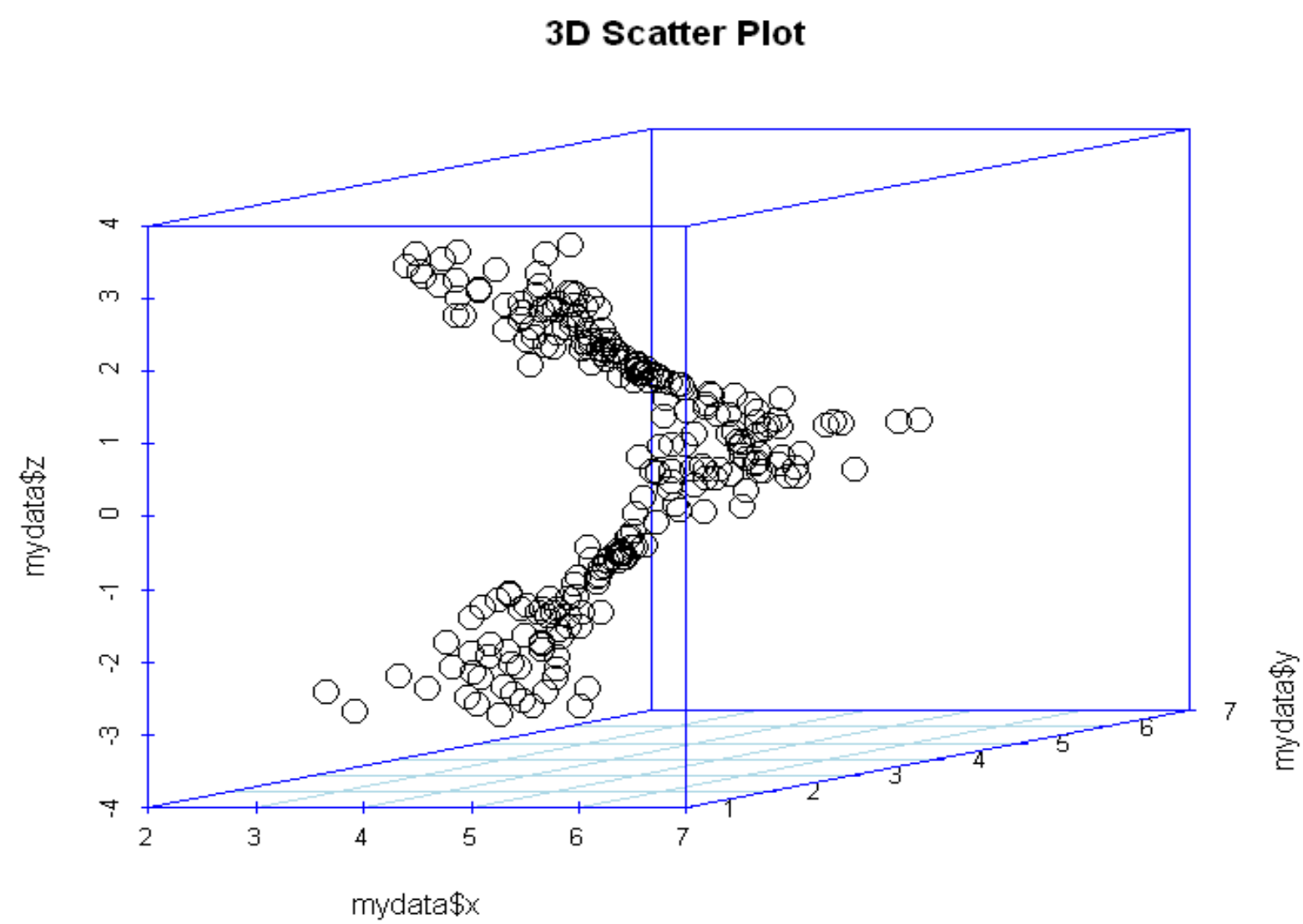
# 3D Sectors chart



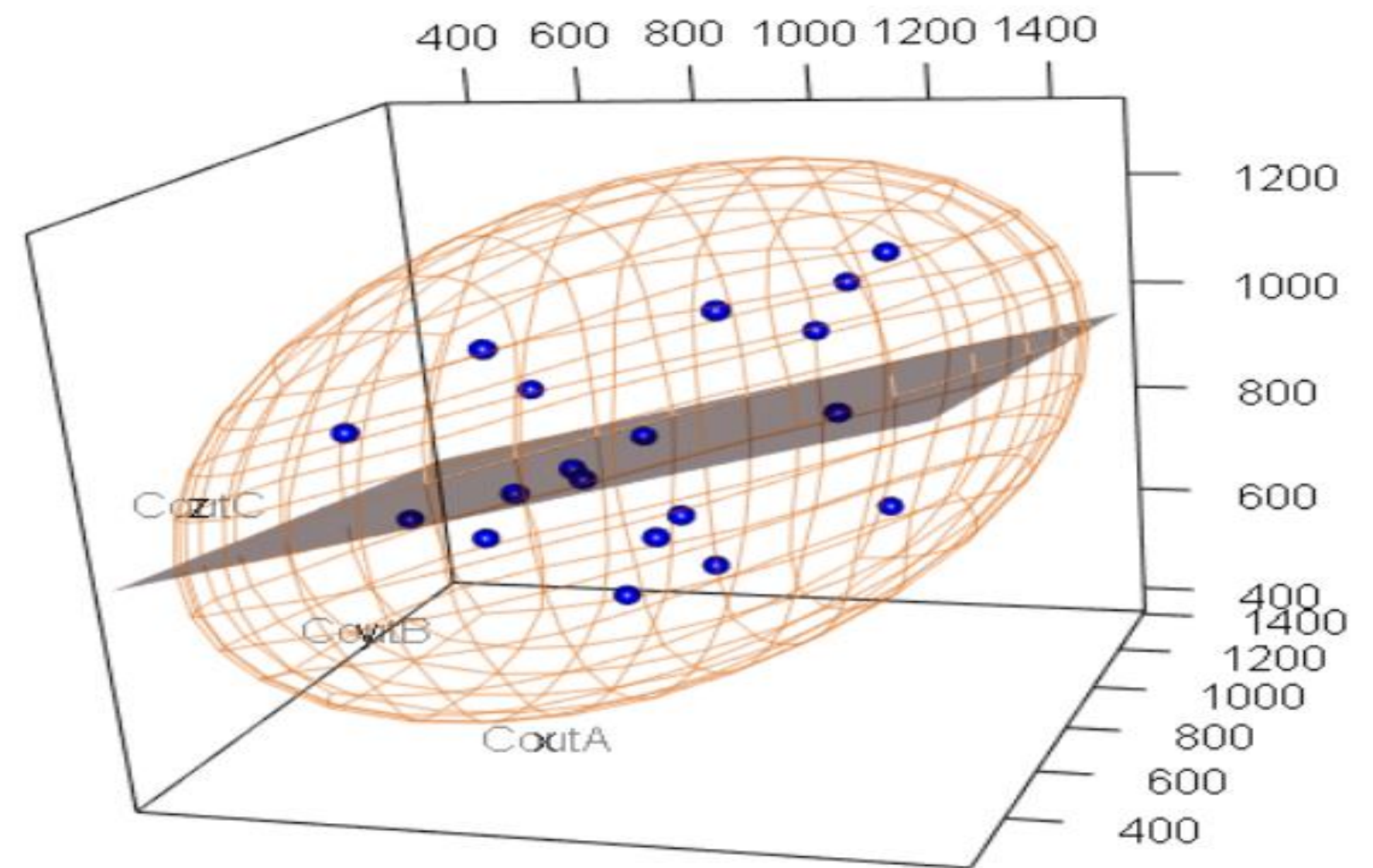
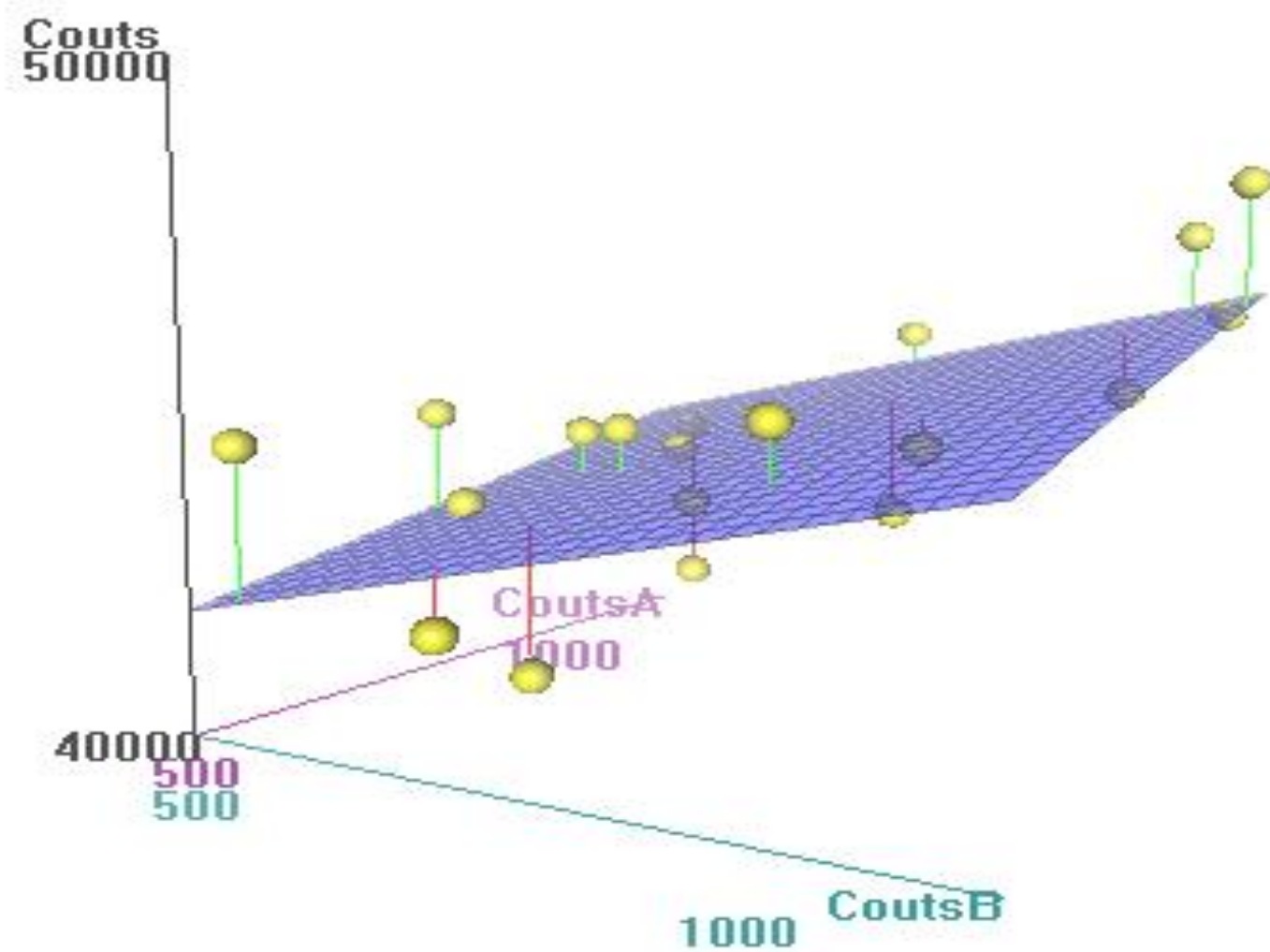
## 3D Surfaces



# 3D Scatter points

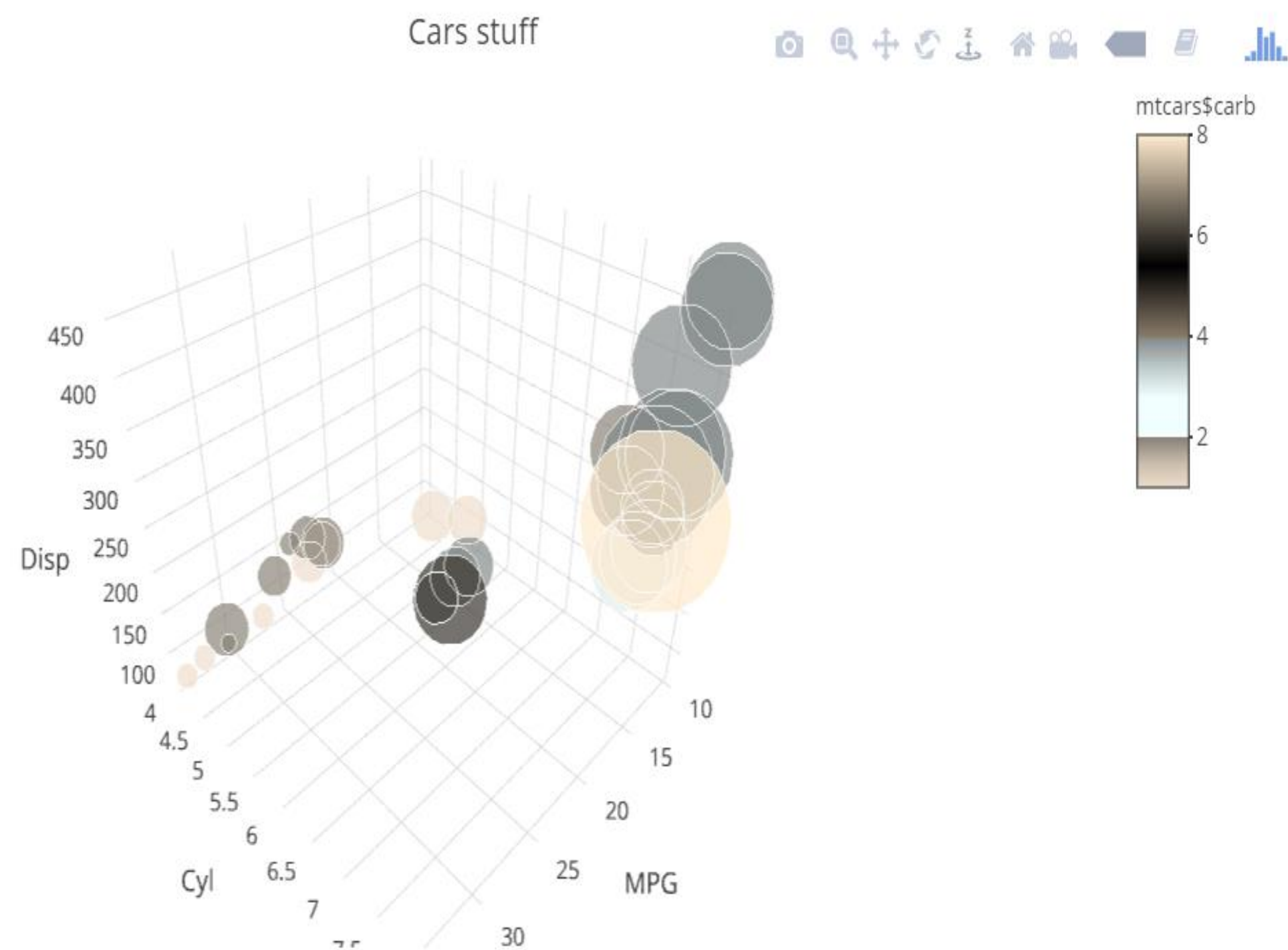


## 3D Bivariate Regression (without/with confidence ellipsoid)

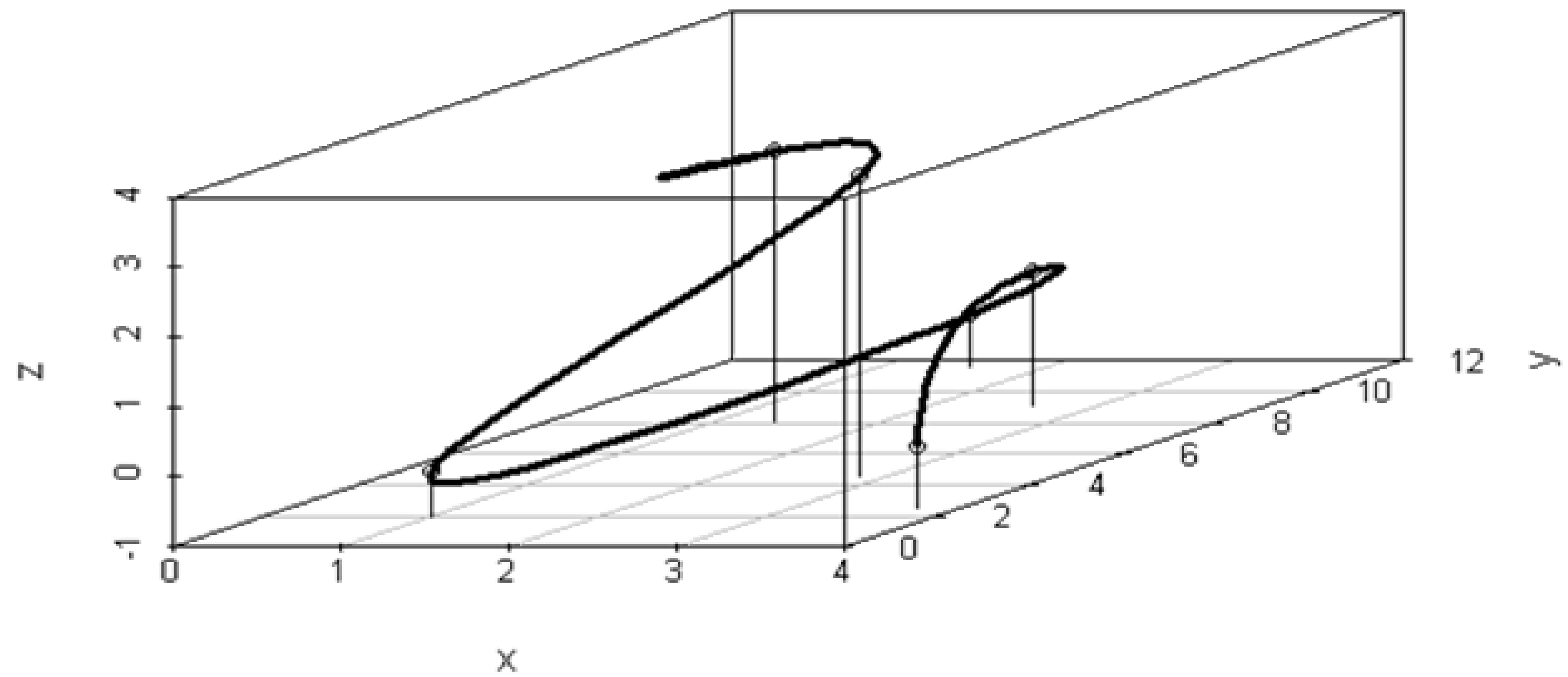




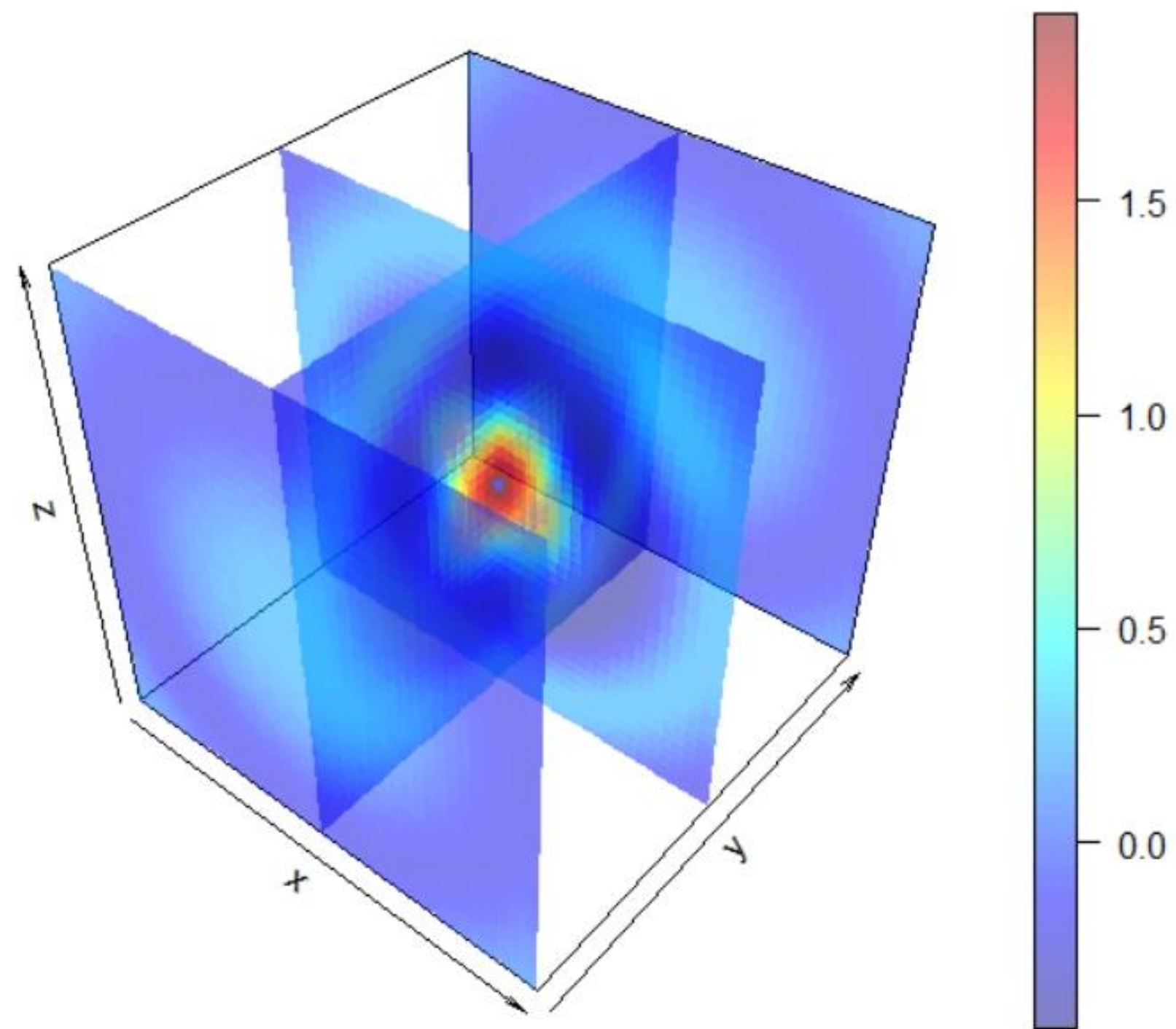
# 3D Bubbles chart



# 3D Splines



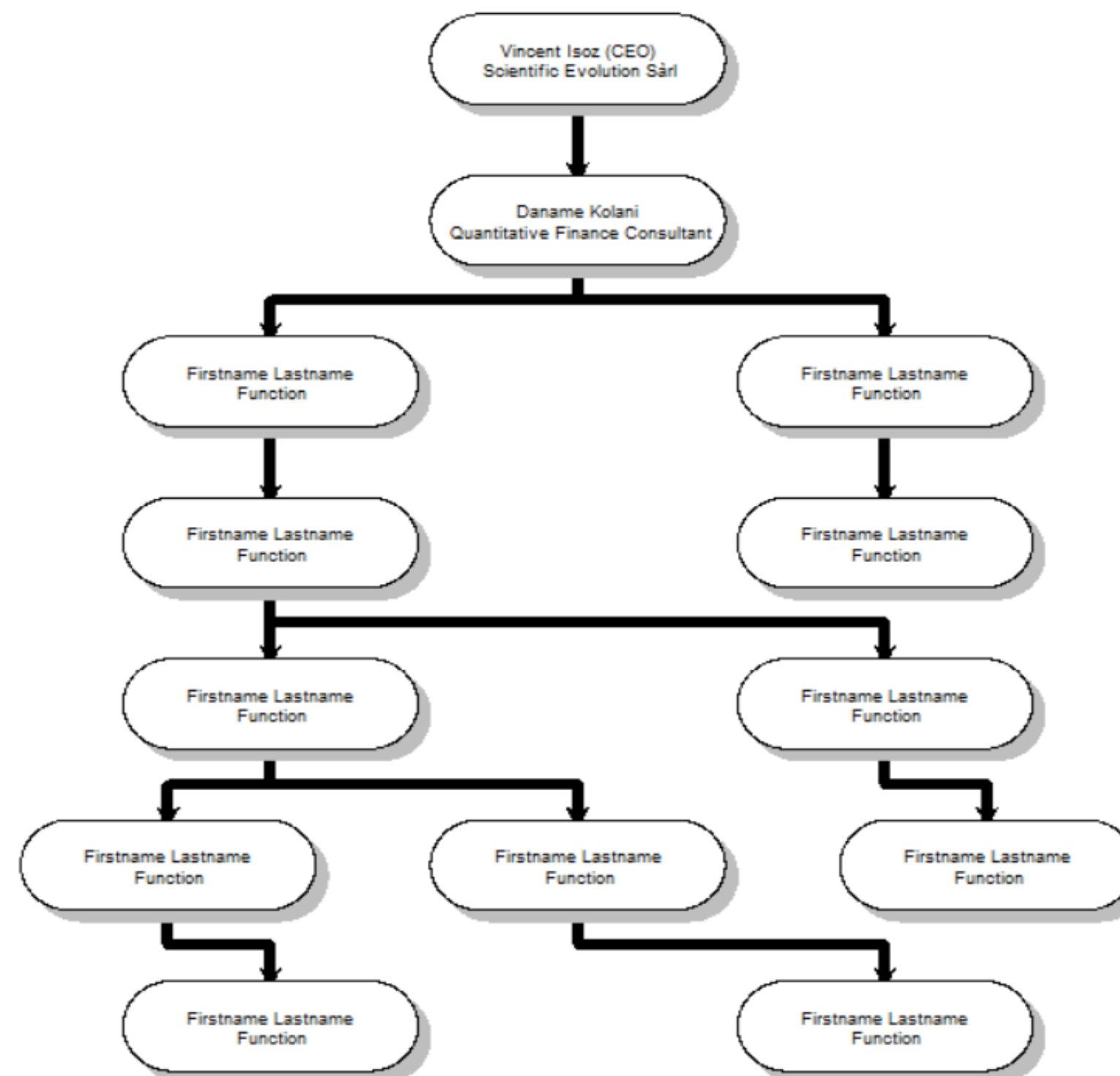
## 3D Slices chart (aka 4D chart)



# Management Charts



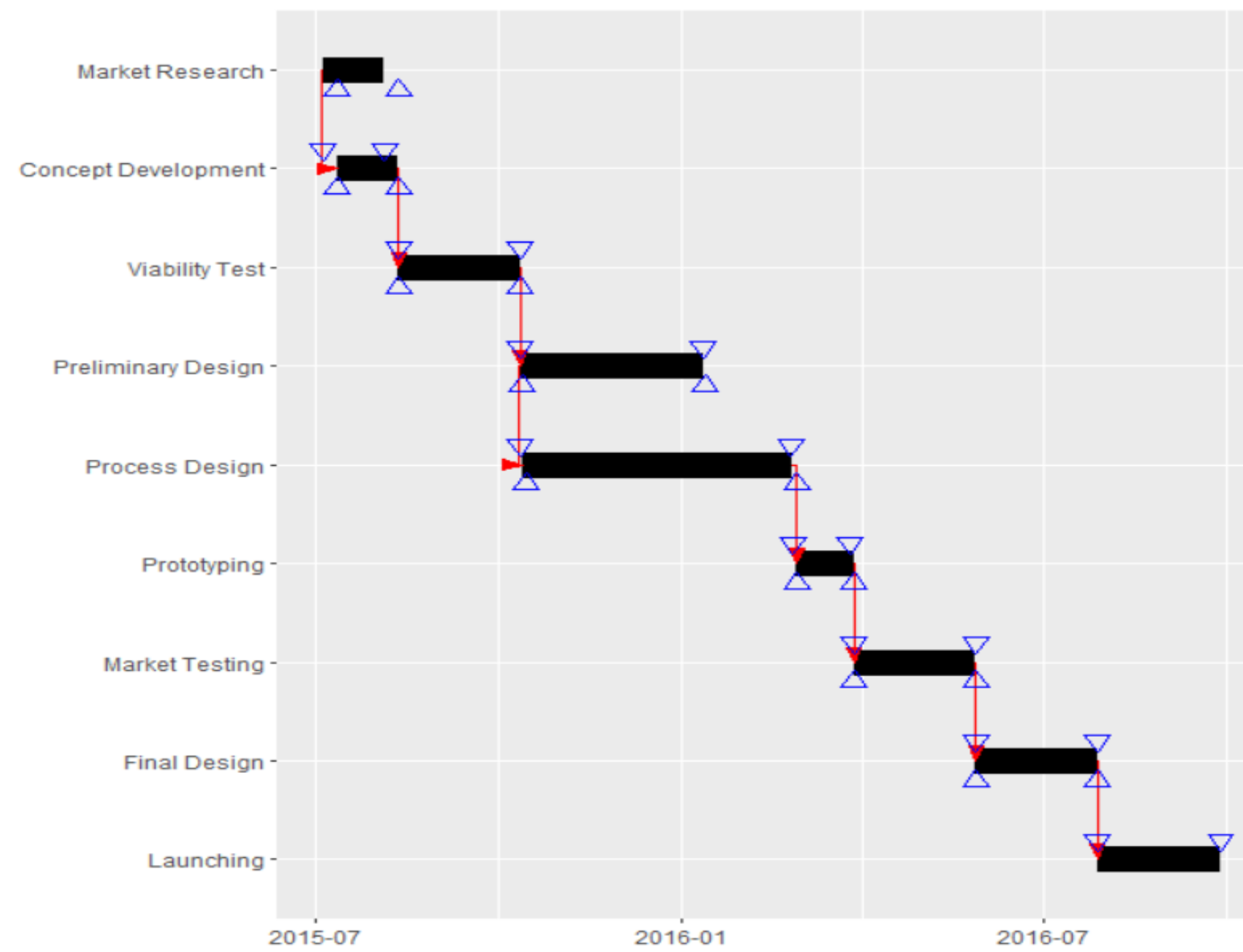
# Orgchart



# Chronology (Timeline)

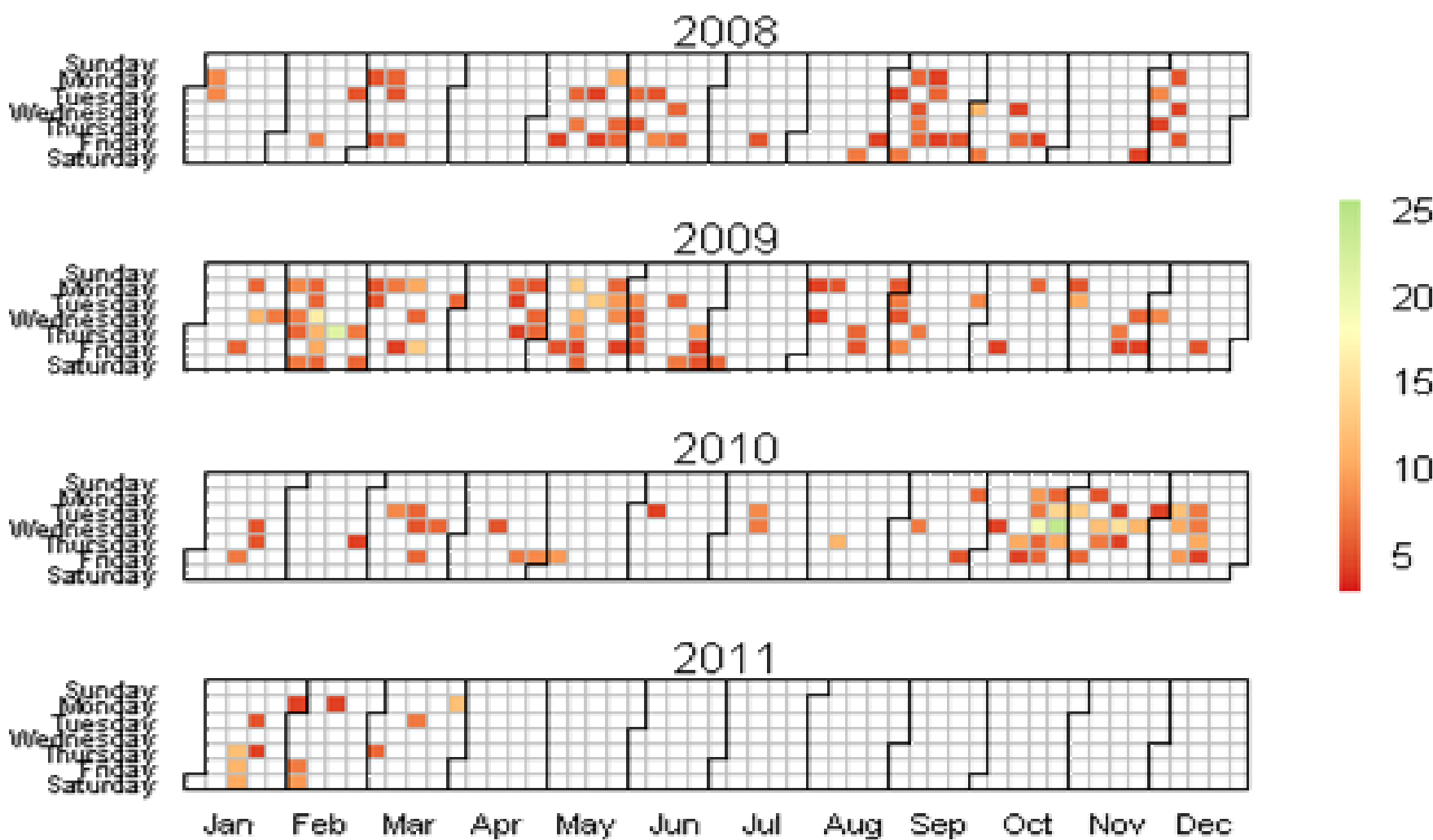


# Gantt chart

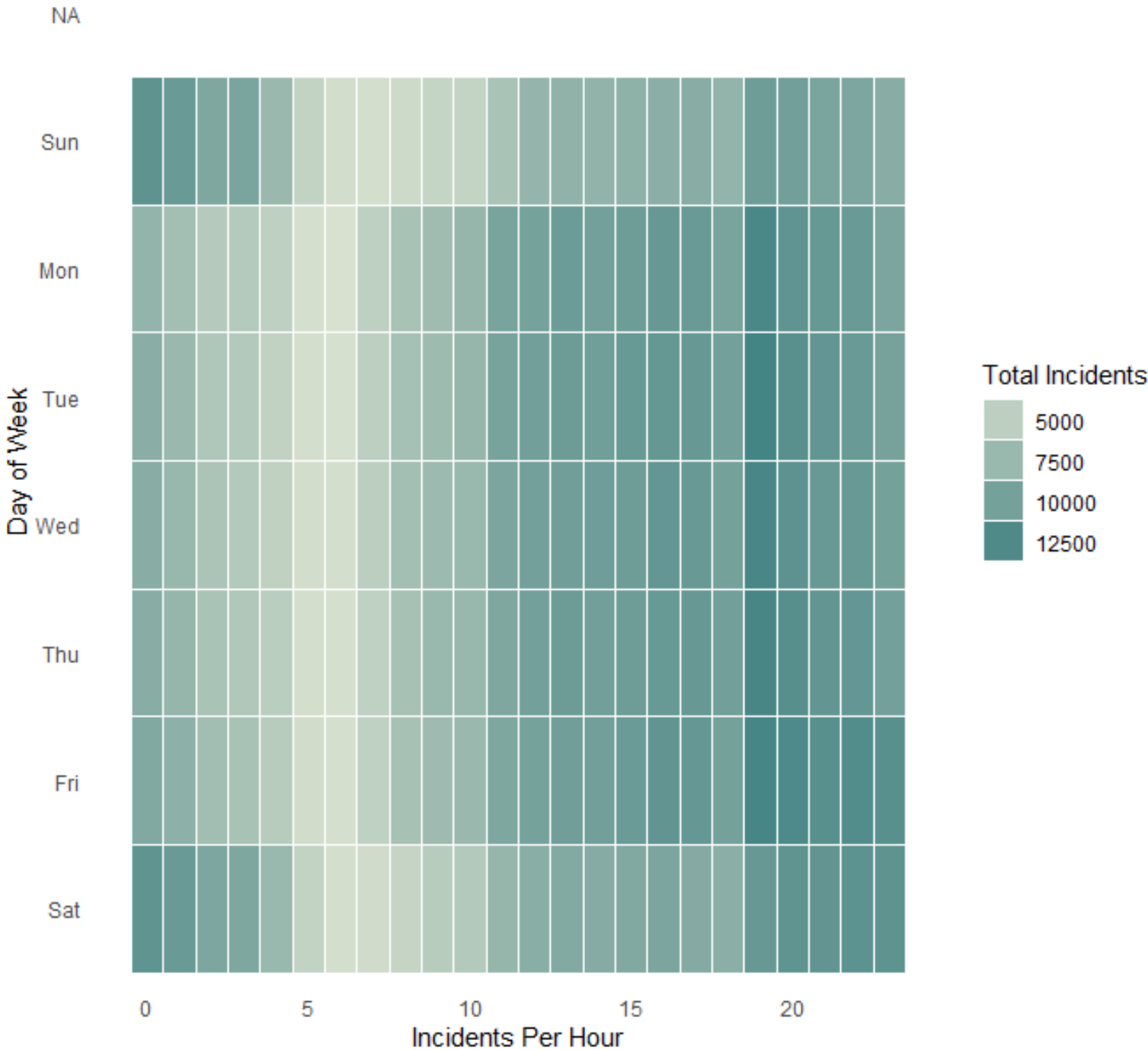


# Calendar Heat Map chart

Calendar Heat Map of Trainees



Histogram of Seattle Incidents by Day of Week and Hour



# Sparklines

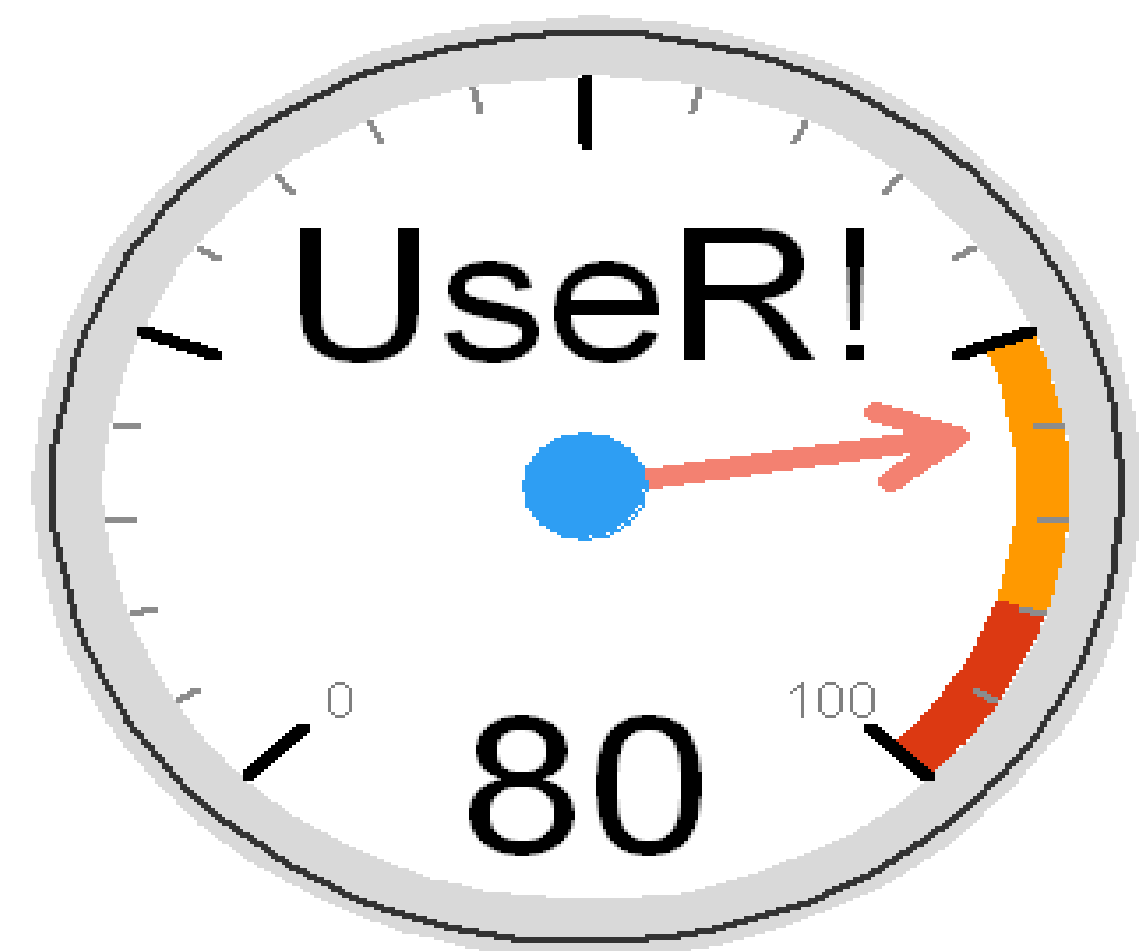
Month	1950s	1960s	1970s	1980s	1990s	2000s
Jan						
Feb						
Mar						
Apr						
May						
Jun						
Jul						
Aug						
Sep						
Oct						

Month	1950s	1960s	1970s	1980s	1990s	2000s
Jan						
Feb						
Mar						
Apr						
May						
Jun						
Jul						
Aug						
Sep						
Oct						

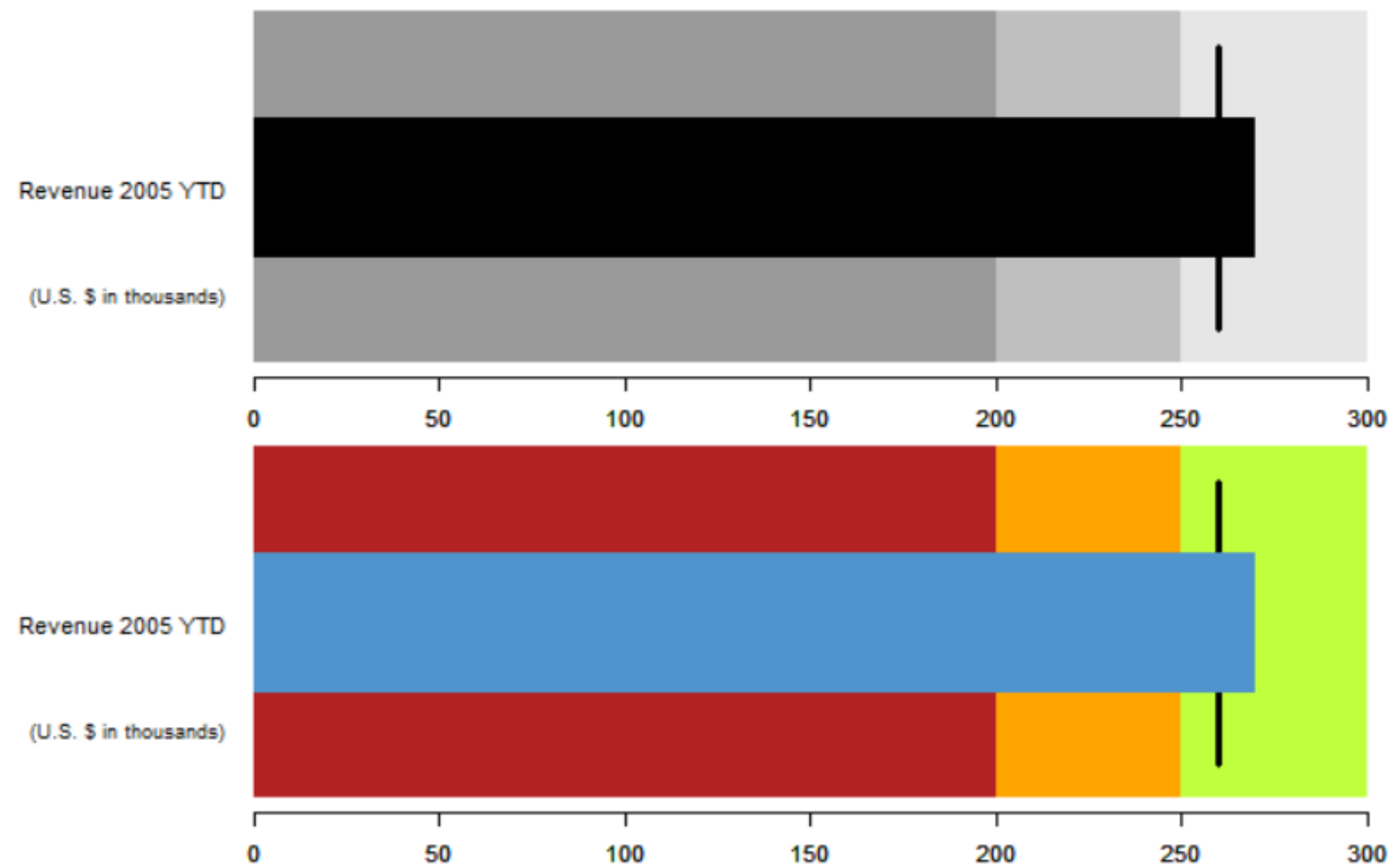
Location	Month	Var	Decade	Mean	SD	Min	Max	Samples	Series
Edmonton, Alberta	Aug	Temperature	1950s	14.8	1.2	13.1	17		
Edmonton, Alberta	Aug	Temperature	1960s	15.7	1.61	13	18.2		
Edmonton, Alberta	Aug	Temperature	1970s	15.2	1.82	12.4	17.9		
Edmonton, Alberta	Aug	Temperature	1980s	15.5	2.03	13	18.8		
Edmonton, Alberta	Aug	Temperature	1990s	16	1.64	13.1	18.5		
Edmonton, Alberta	Aug	Temperature	2000s	15.3	1.22	14	17.3		

Decade	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1950s												
1960s												
1970s												
1980s												
1990s												
2000s												

## Gauge chart

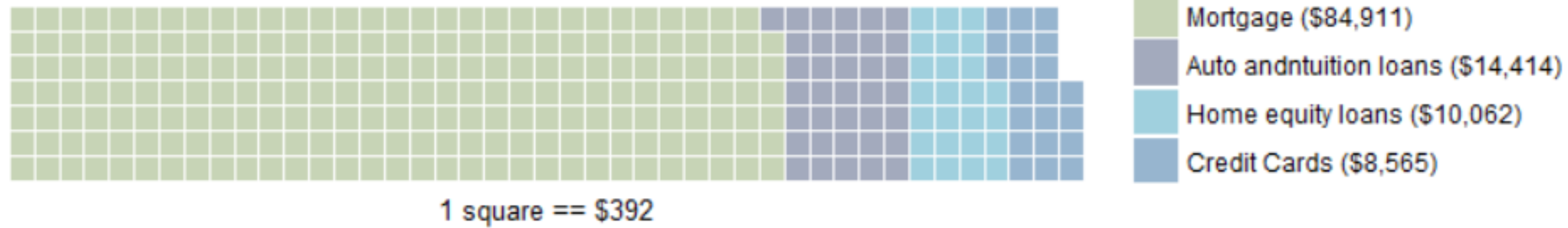


# Bullet chart



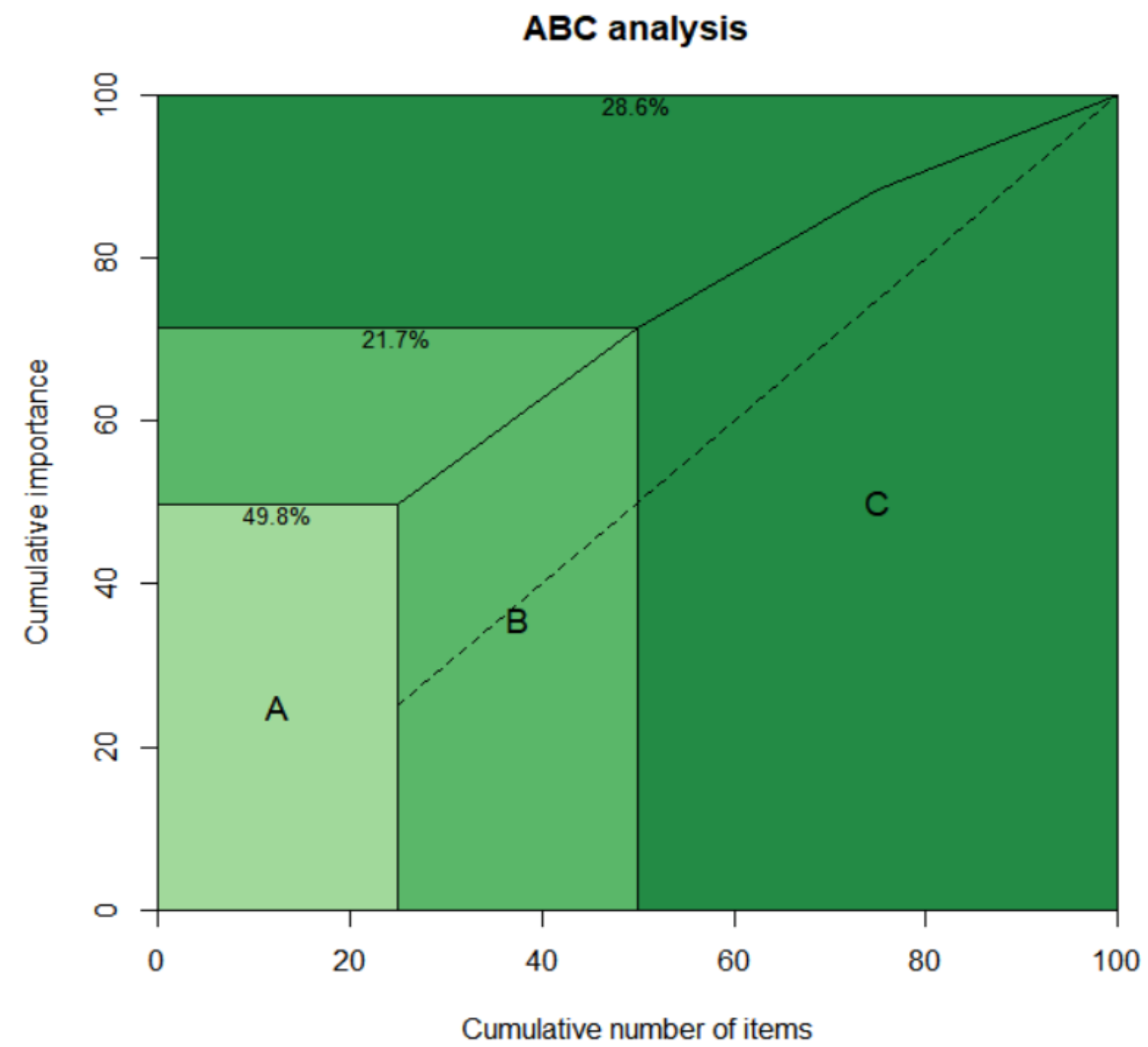
# Waffle chart

## Average Household Savings Each Year

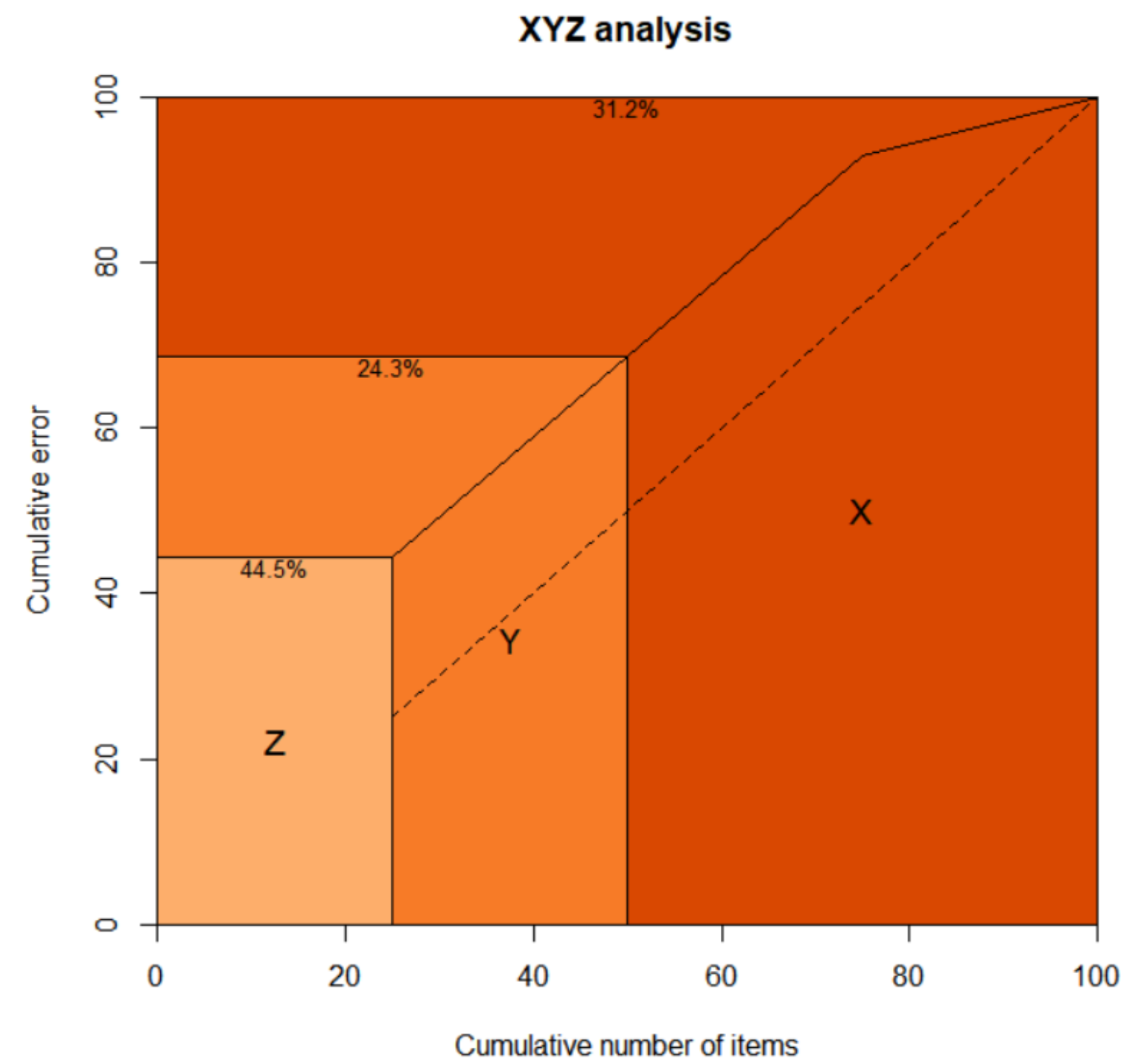




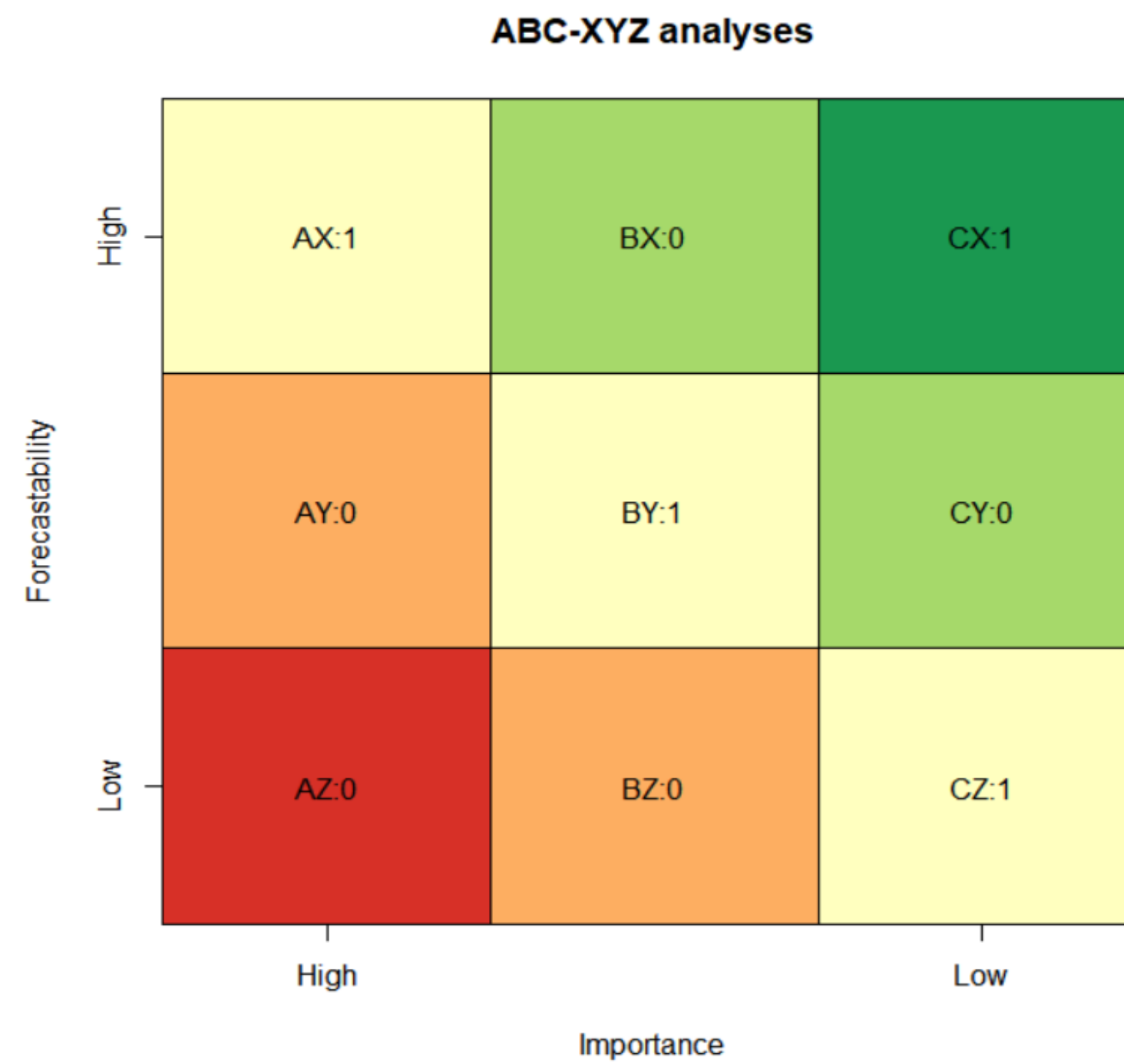
# ABC chart (quality/supply chain)



# XYZ chart (supply chain forecasting)

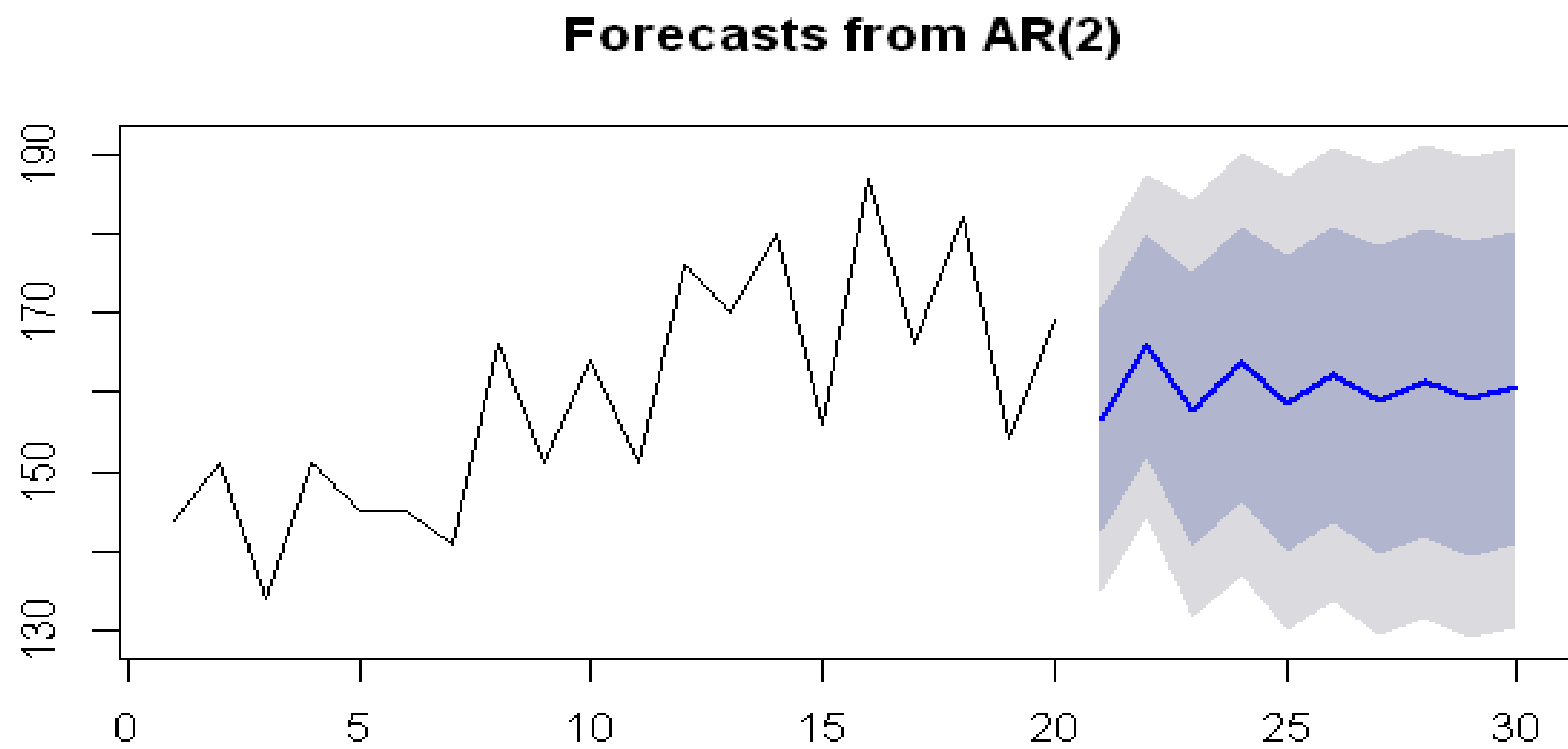


# ABC-XYZ matrix chart

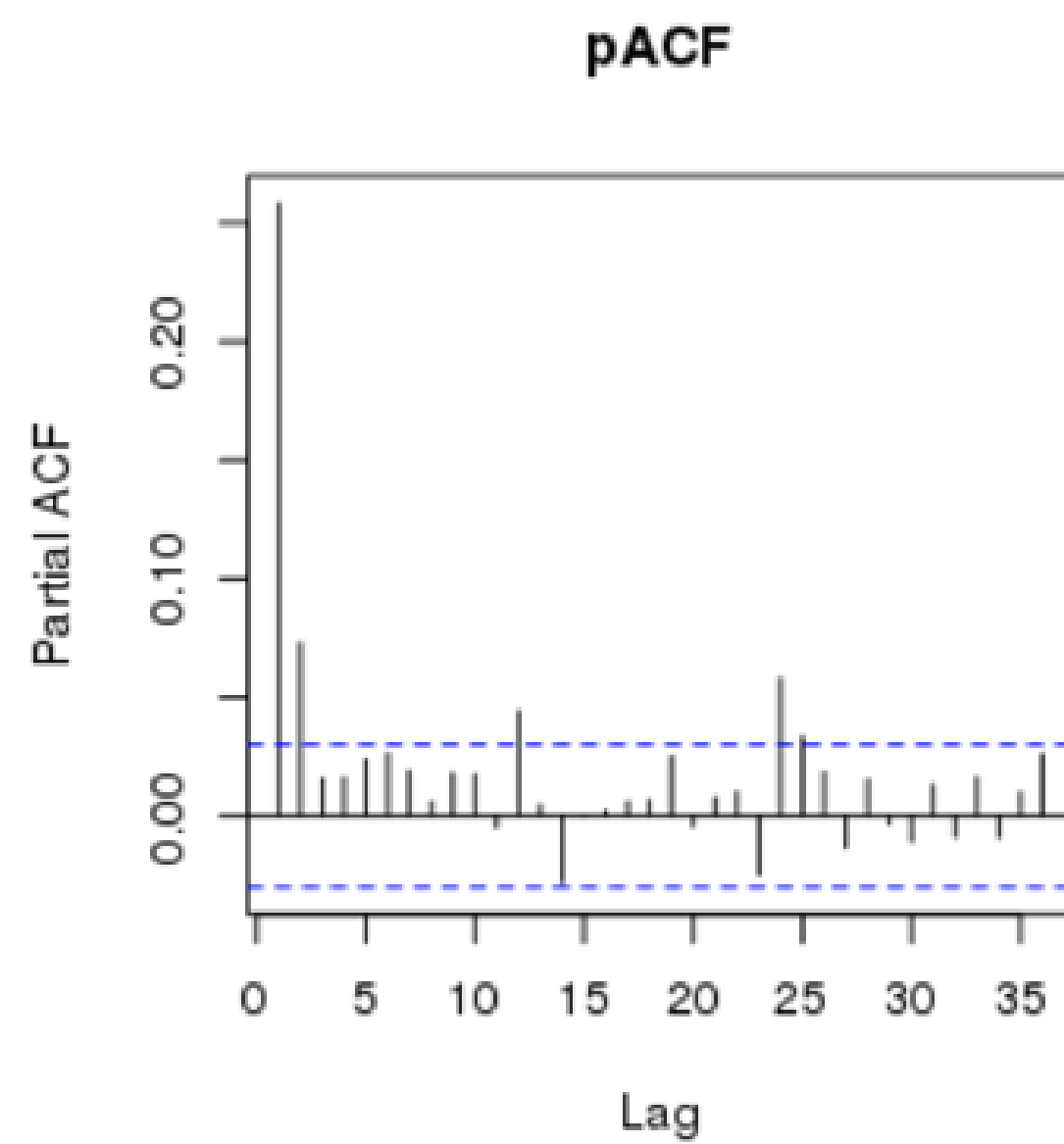
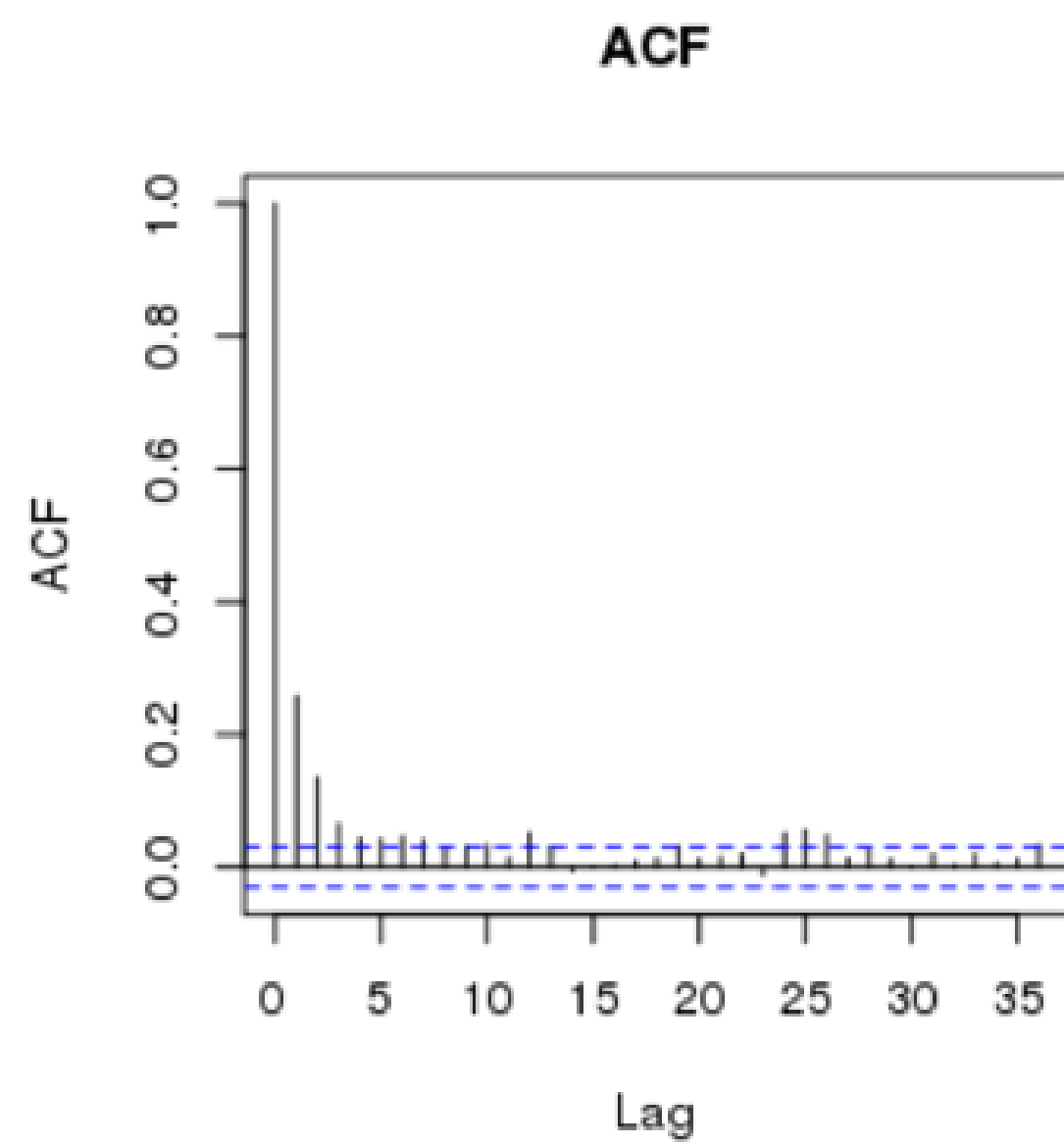


# Finance Charts

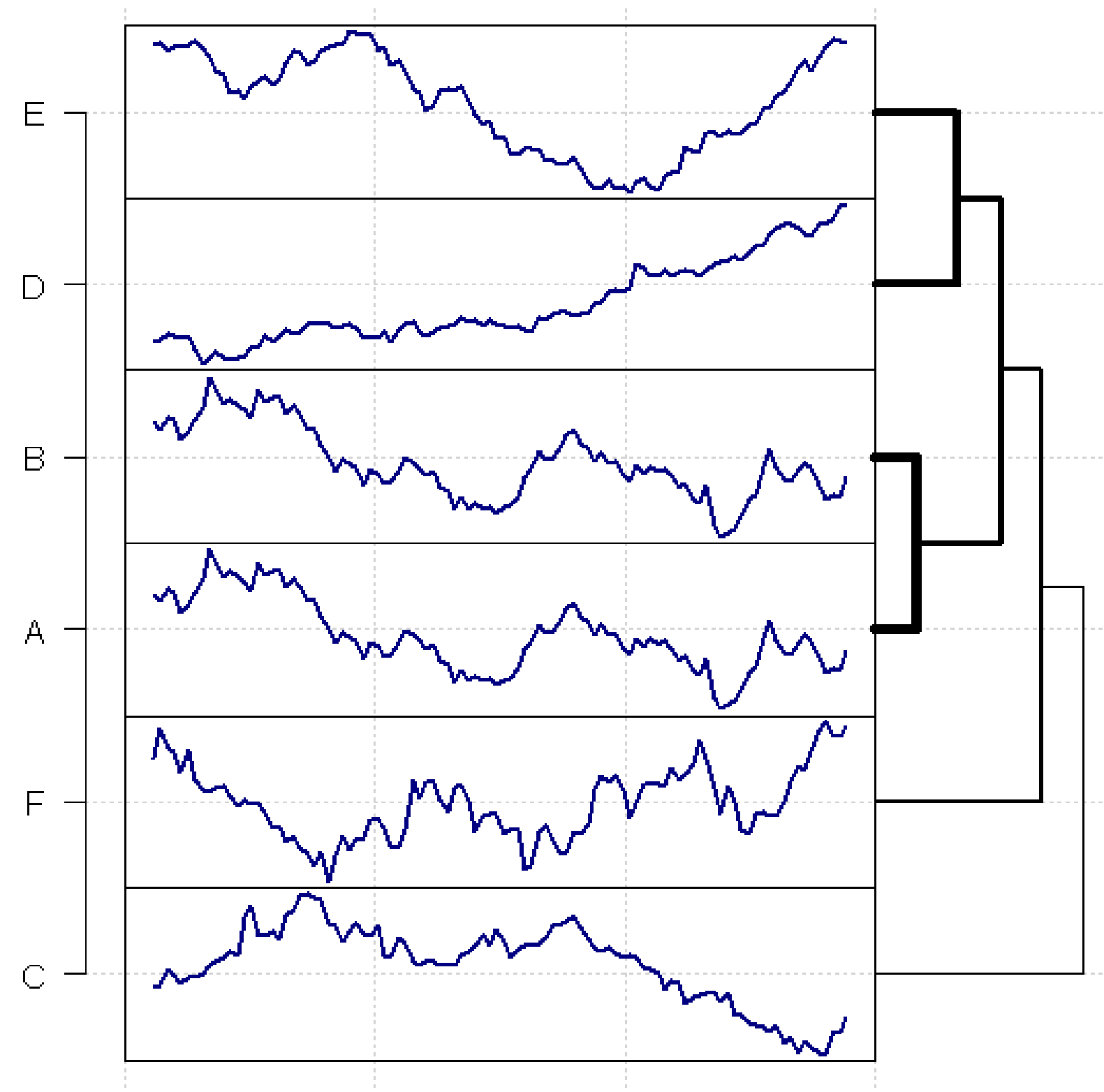
## Fan chart



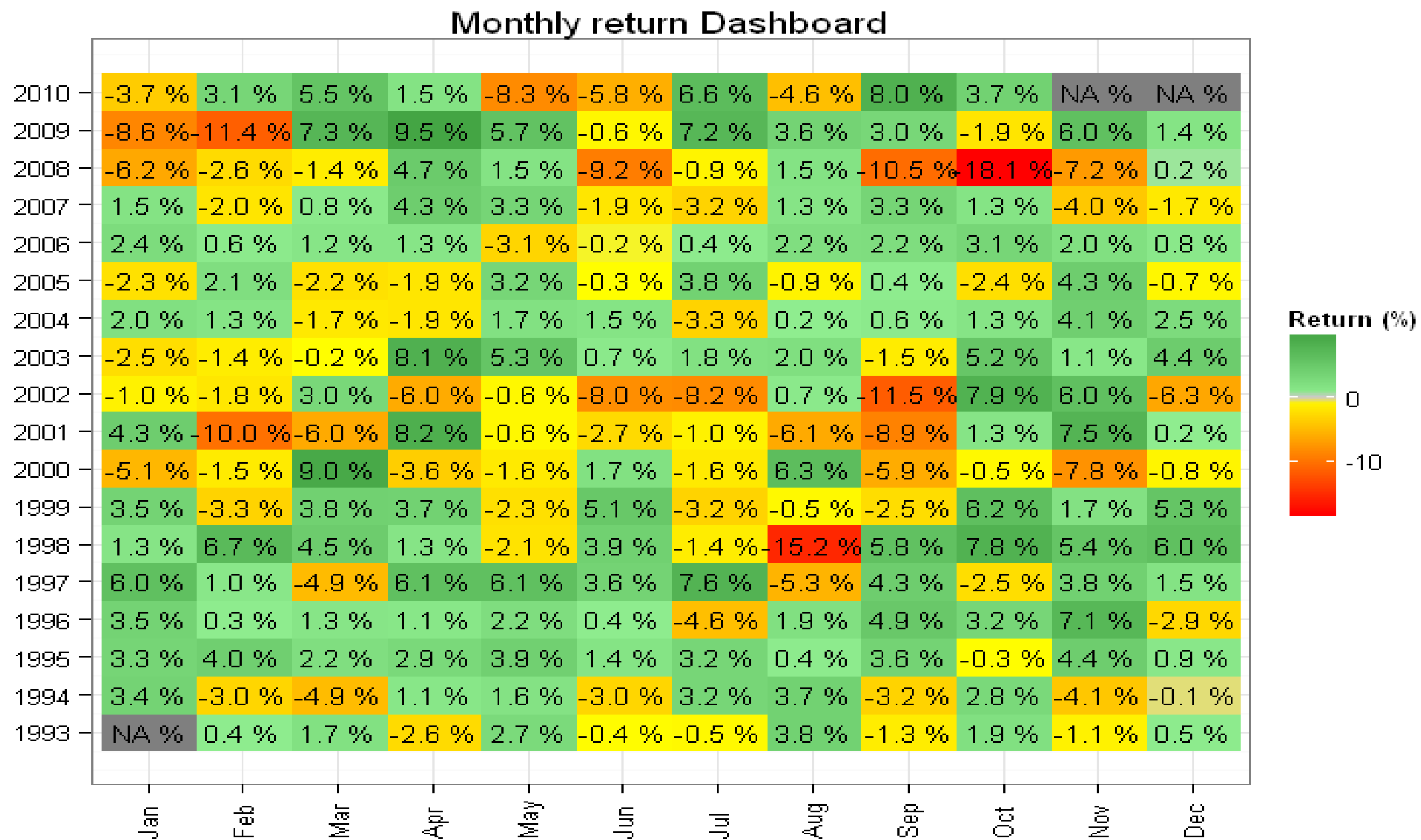
# Autocorrelogram chart



# Temporal series clustering

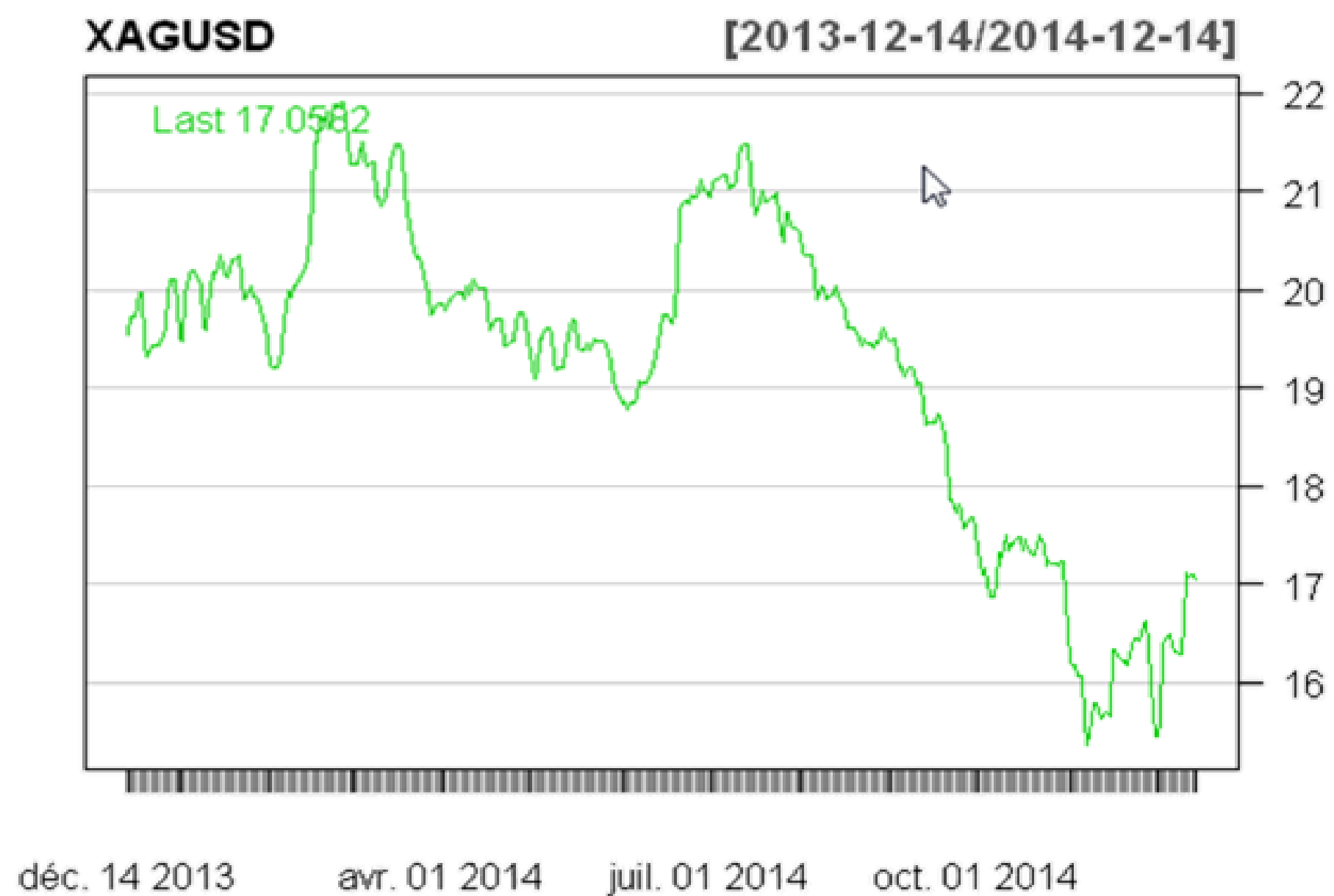


# Return Heat Map chart

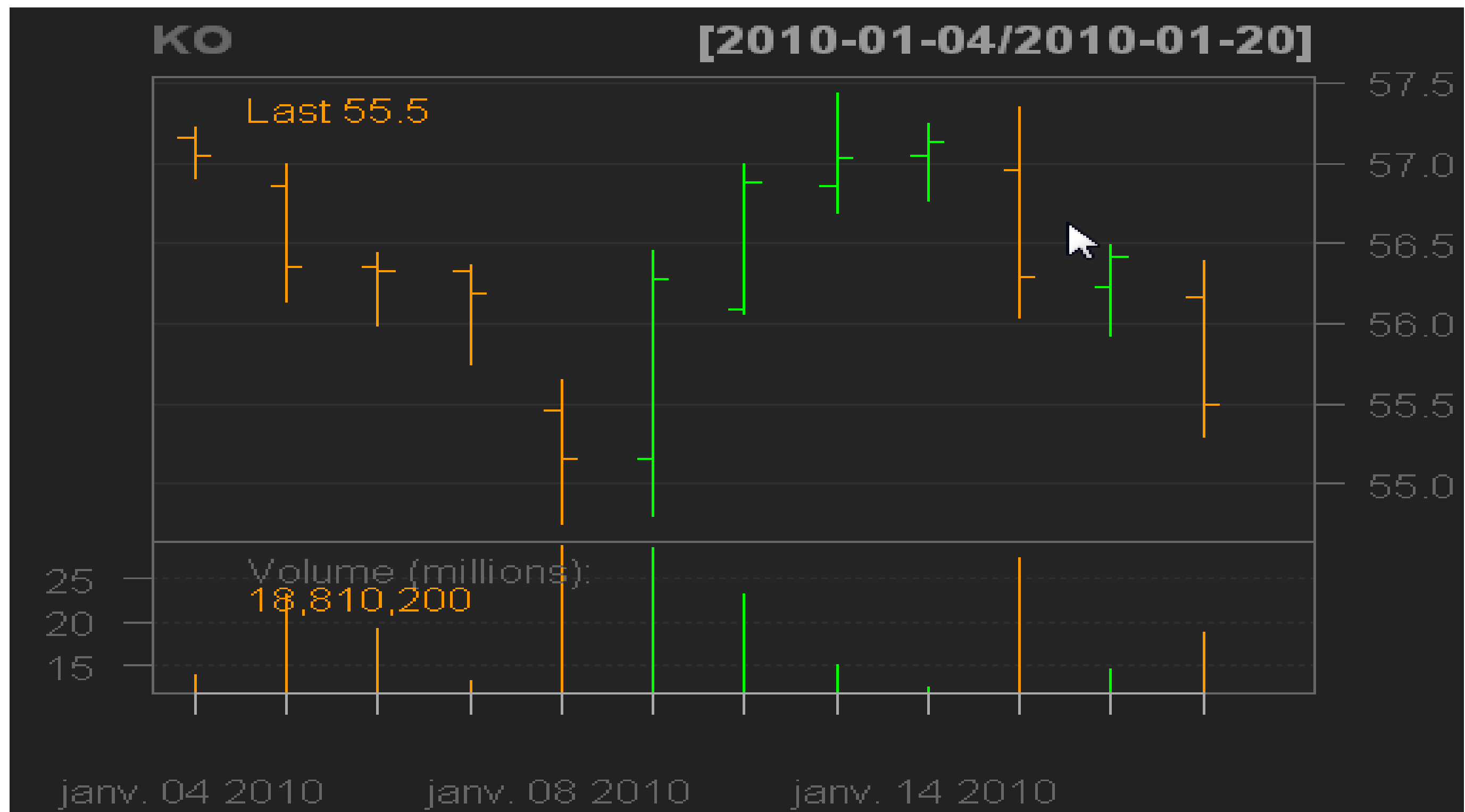




# Financial chronological series and bar charts



## OHLC chart (Open-High-Low-Close chart)



## OHLC Stock chart (Candlestick chart)



# Candlestick and Bar charts with Bollinger bands

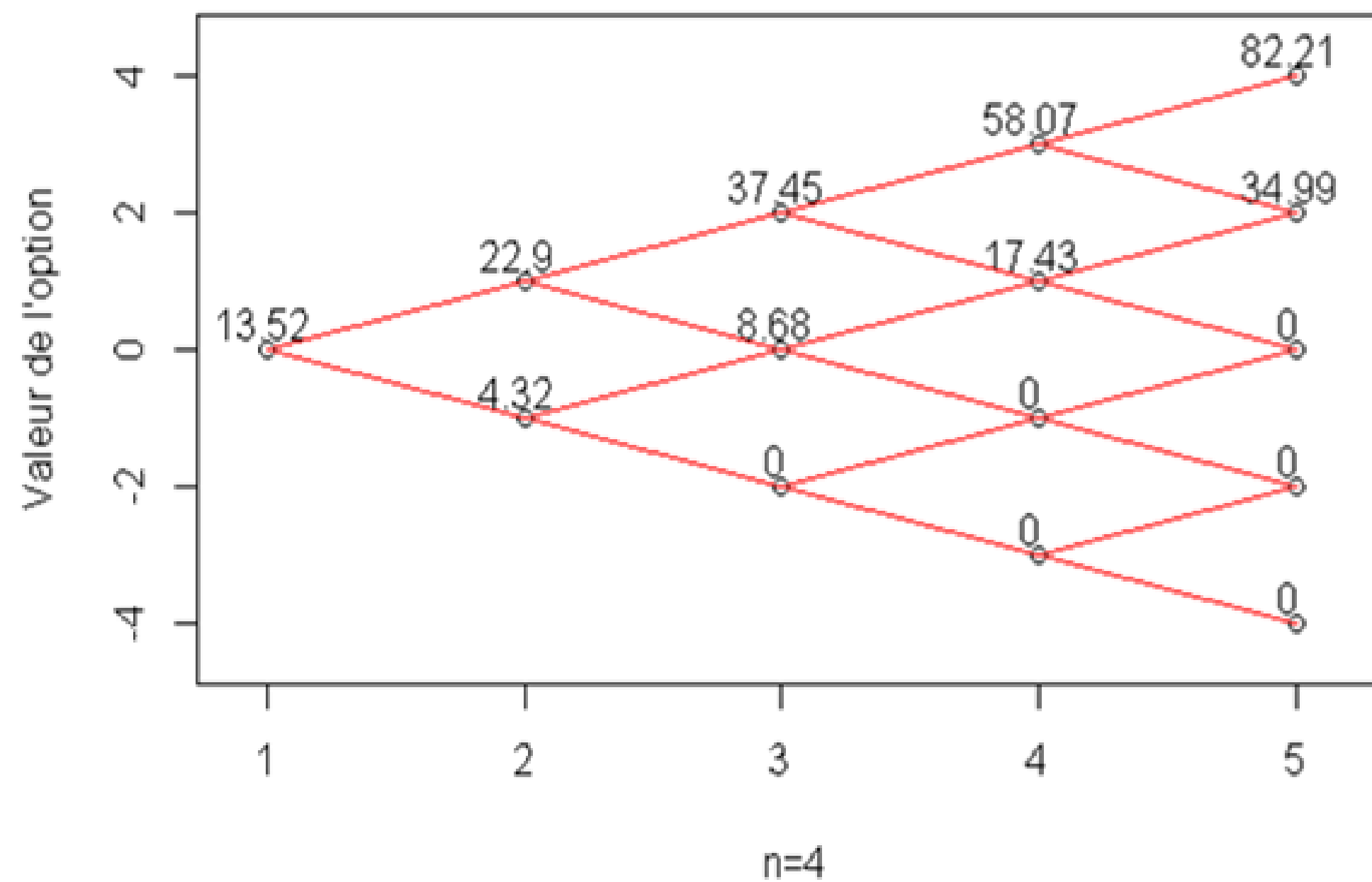


# Variation with reference index

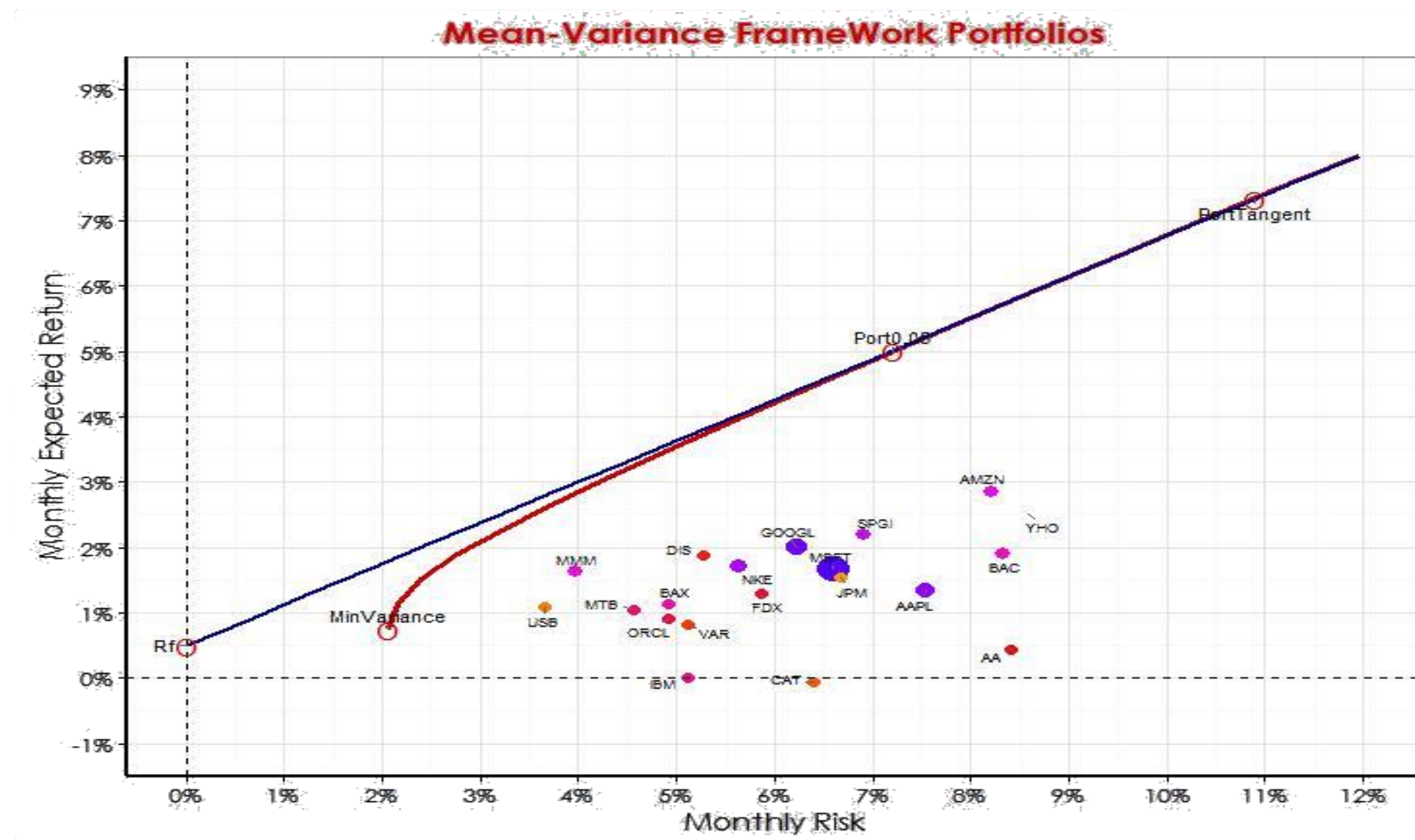


# Binomial Tree chart

modèle binomial à 4 noeuds pour un Call européen

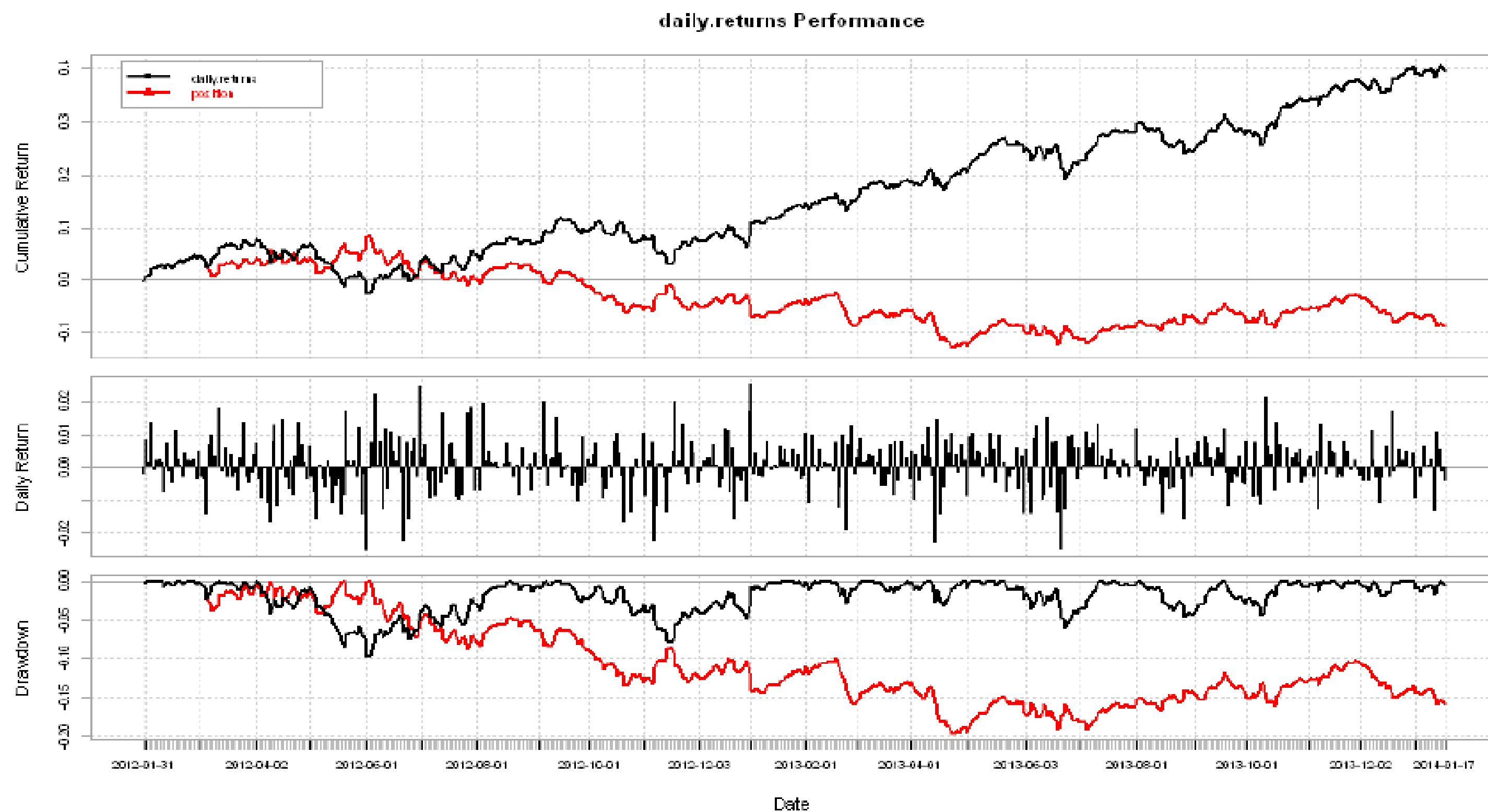


# Mean-Variance efficient frontier and market line



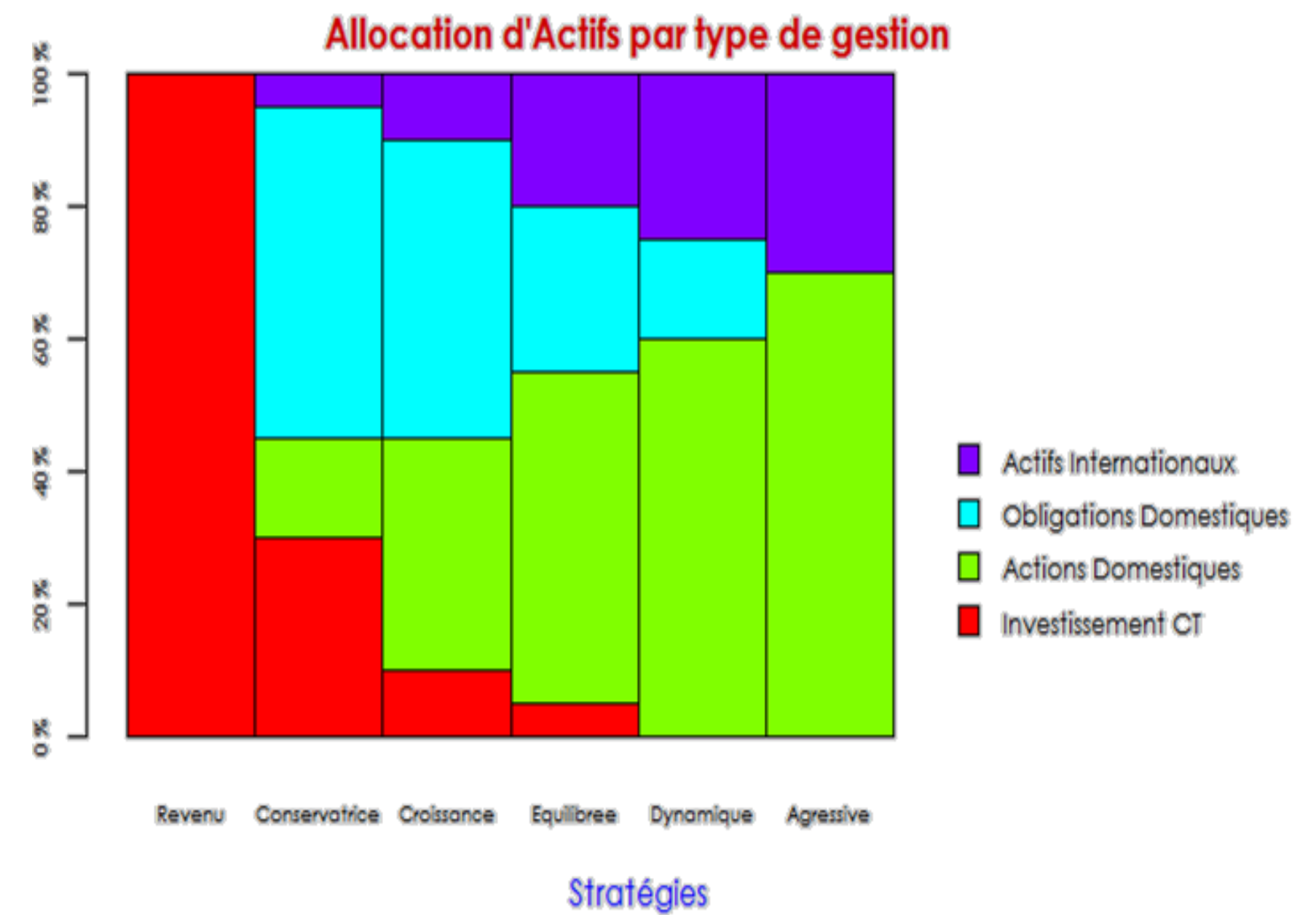
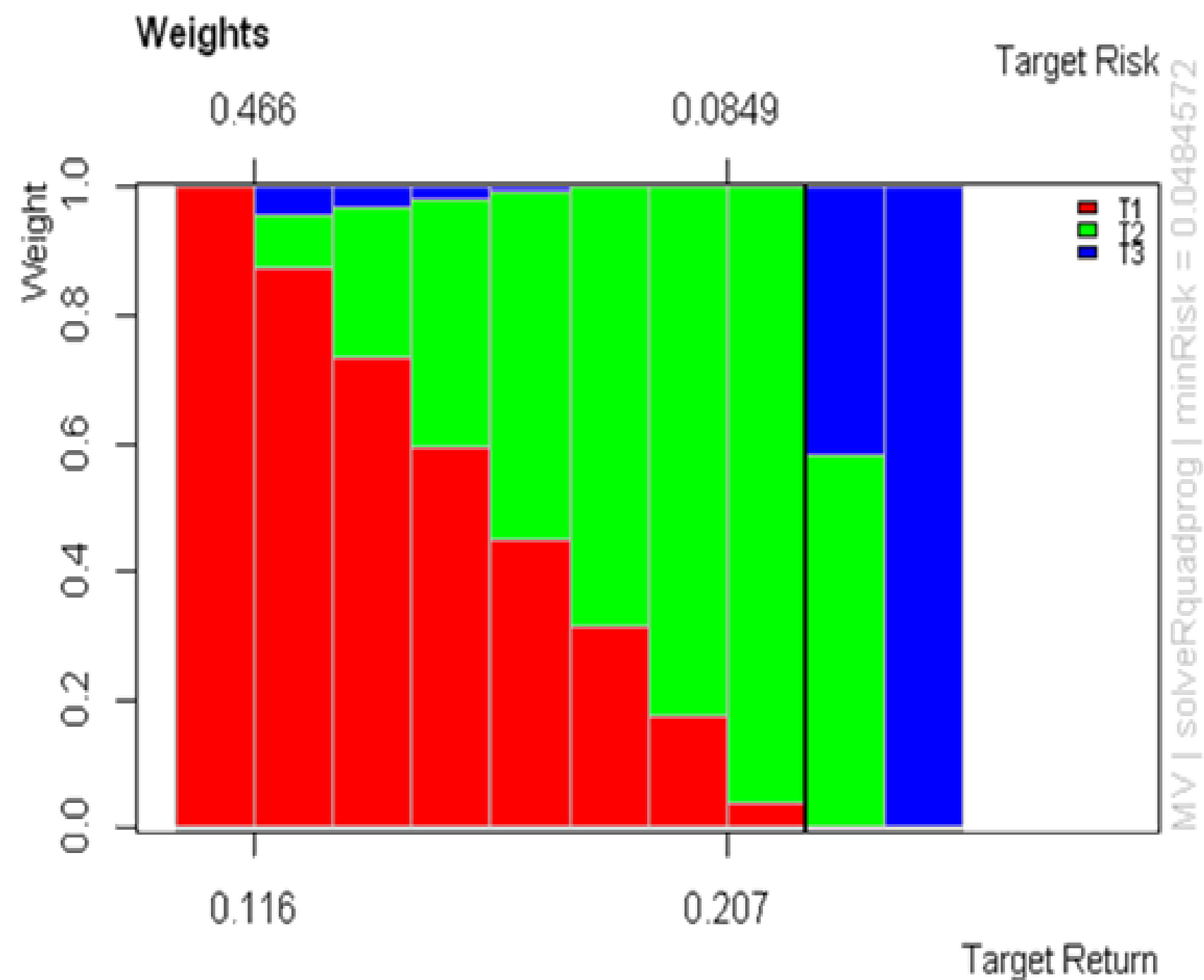


# Performance charts



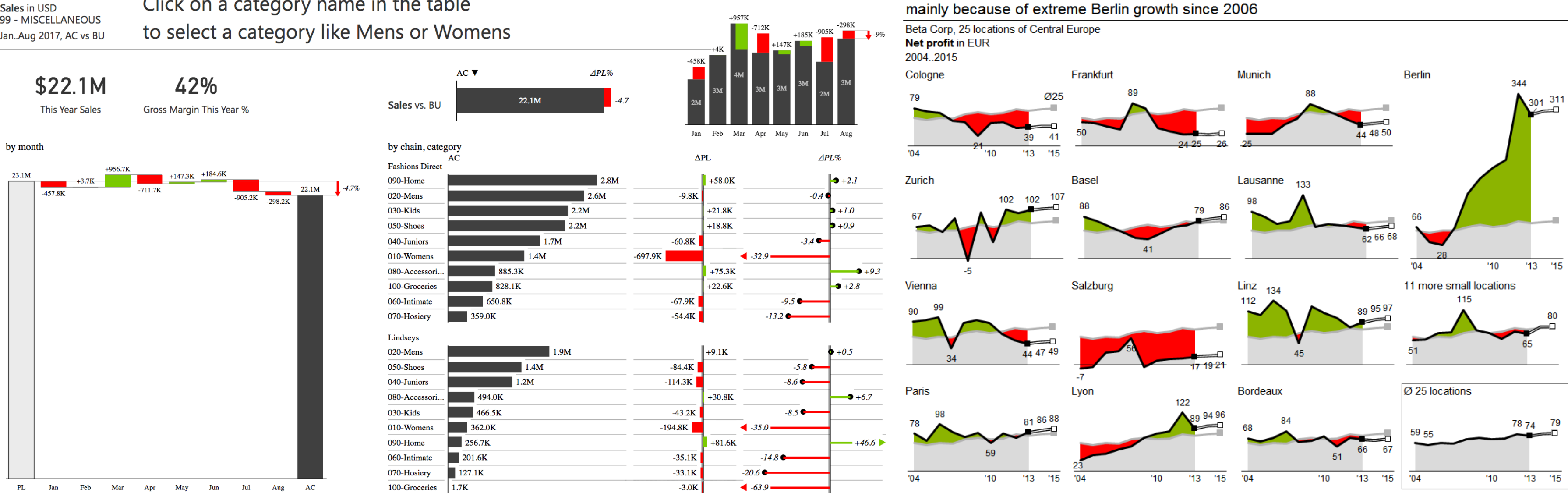


# Asset allocation chart



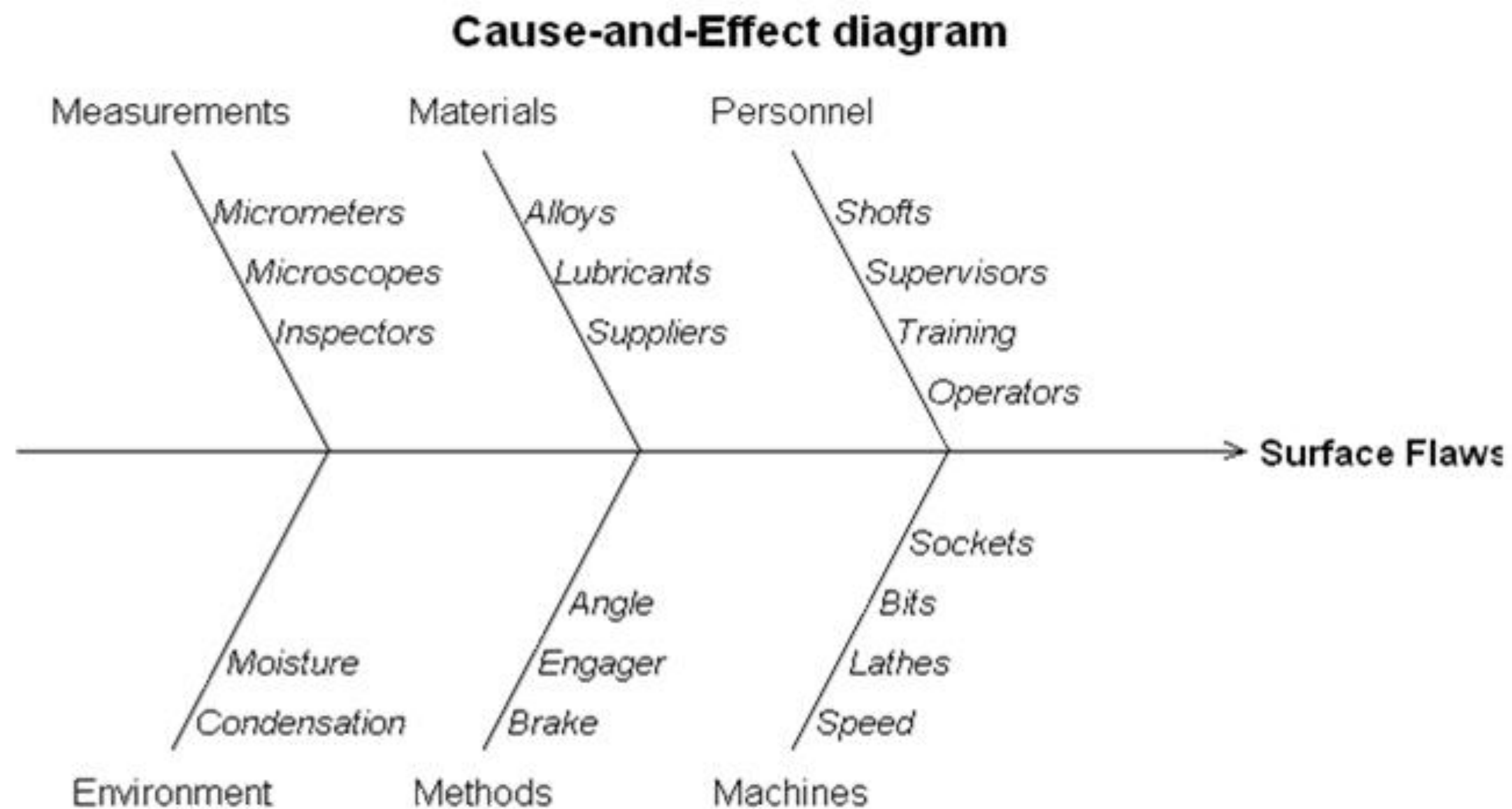
# IBCS (International Business Communication System)

\*not available in R yet but famous

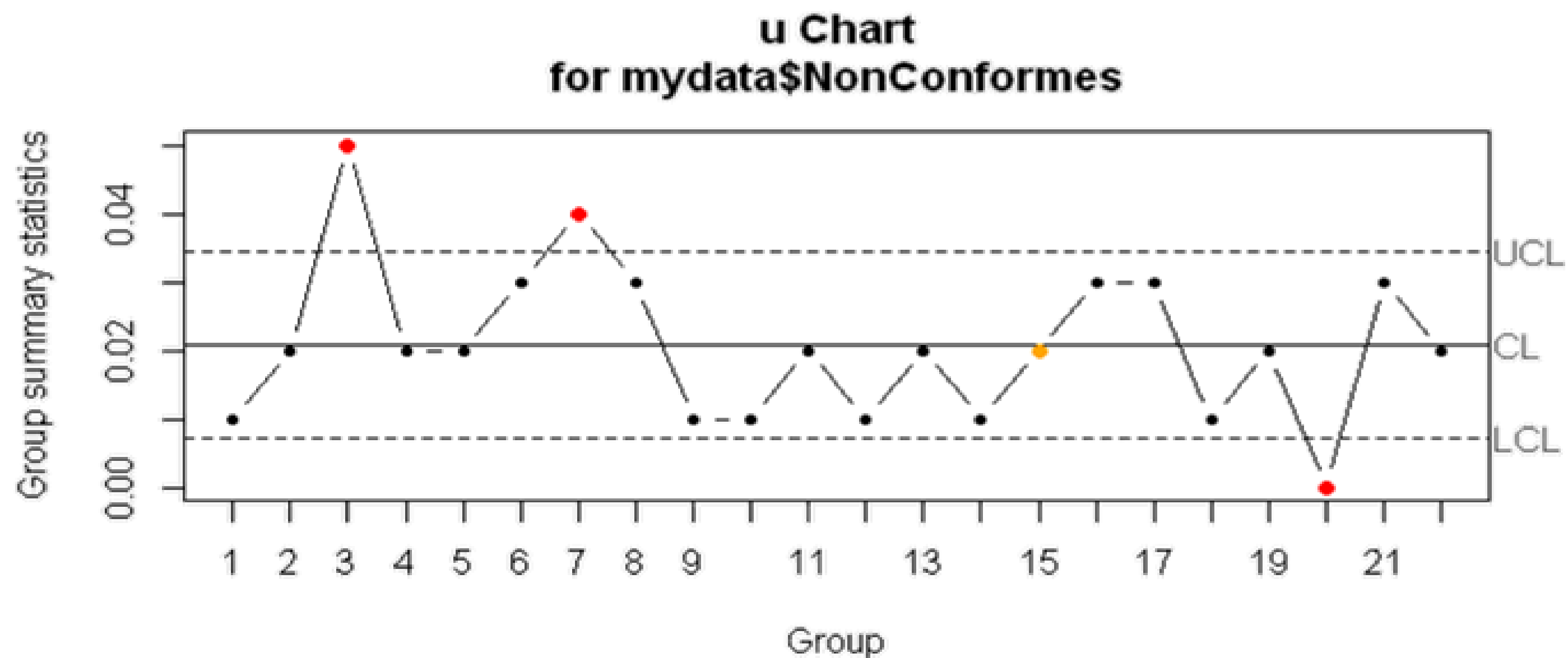


Quality

## Cause & Effect chart (Ishikawa chart)



## Control chart (Six Sigma)

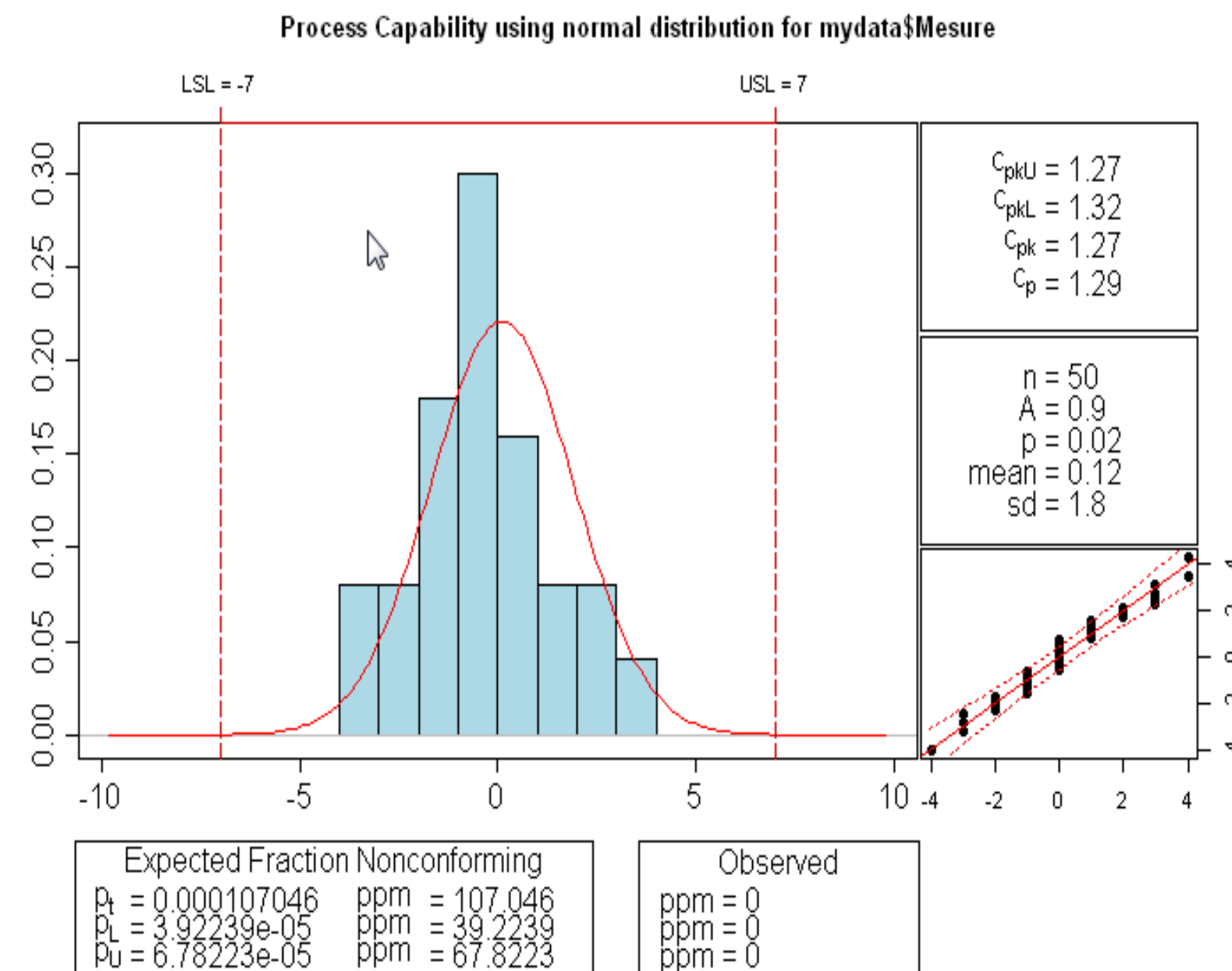


Number of groups = 22  
Center = 0.02090909  
StdDev = 4.572646

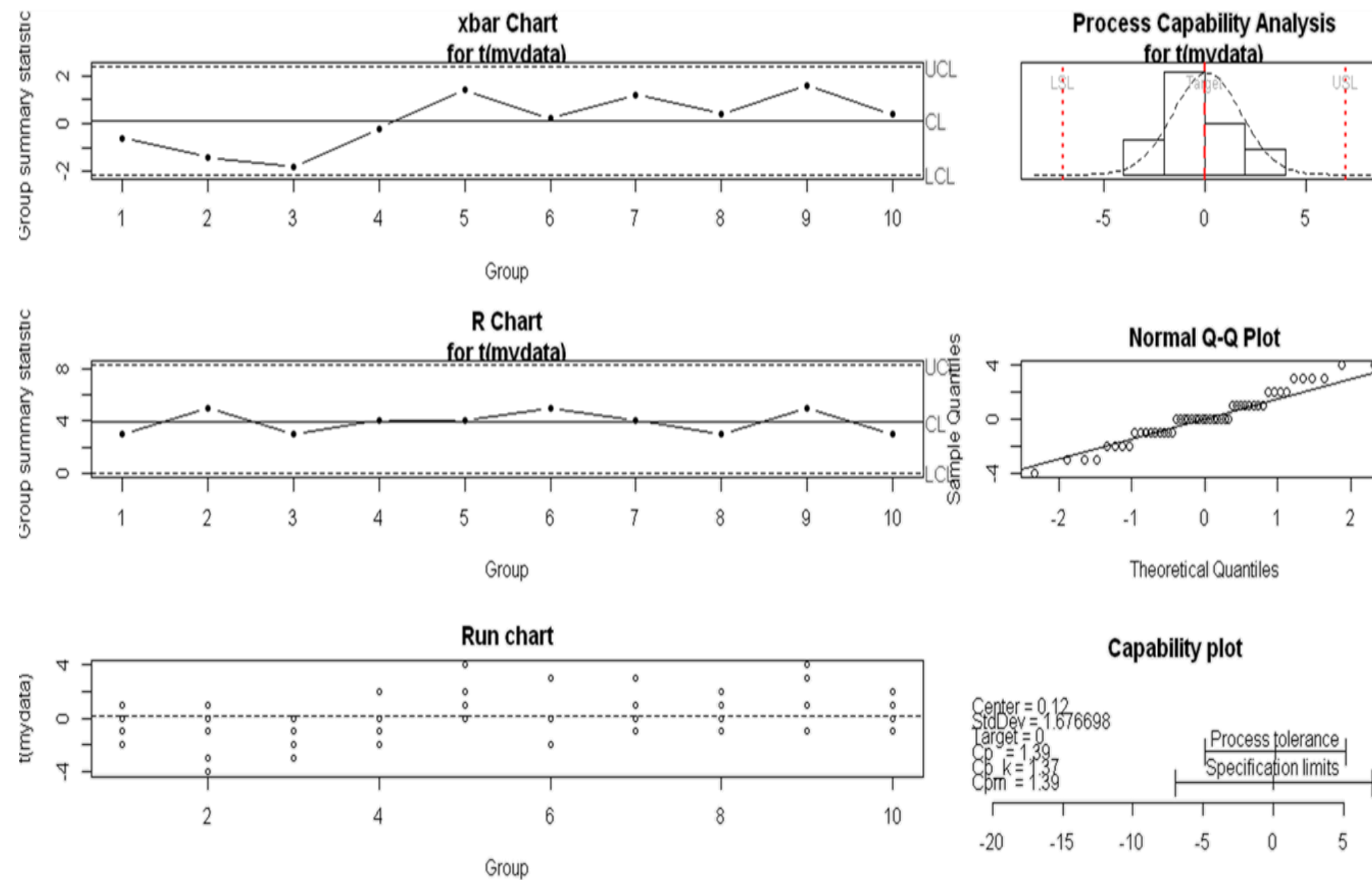
LCL = 0.007191153  
UCL = 0.03462703

Number beyond limits = 3  
Number violating runs = 1

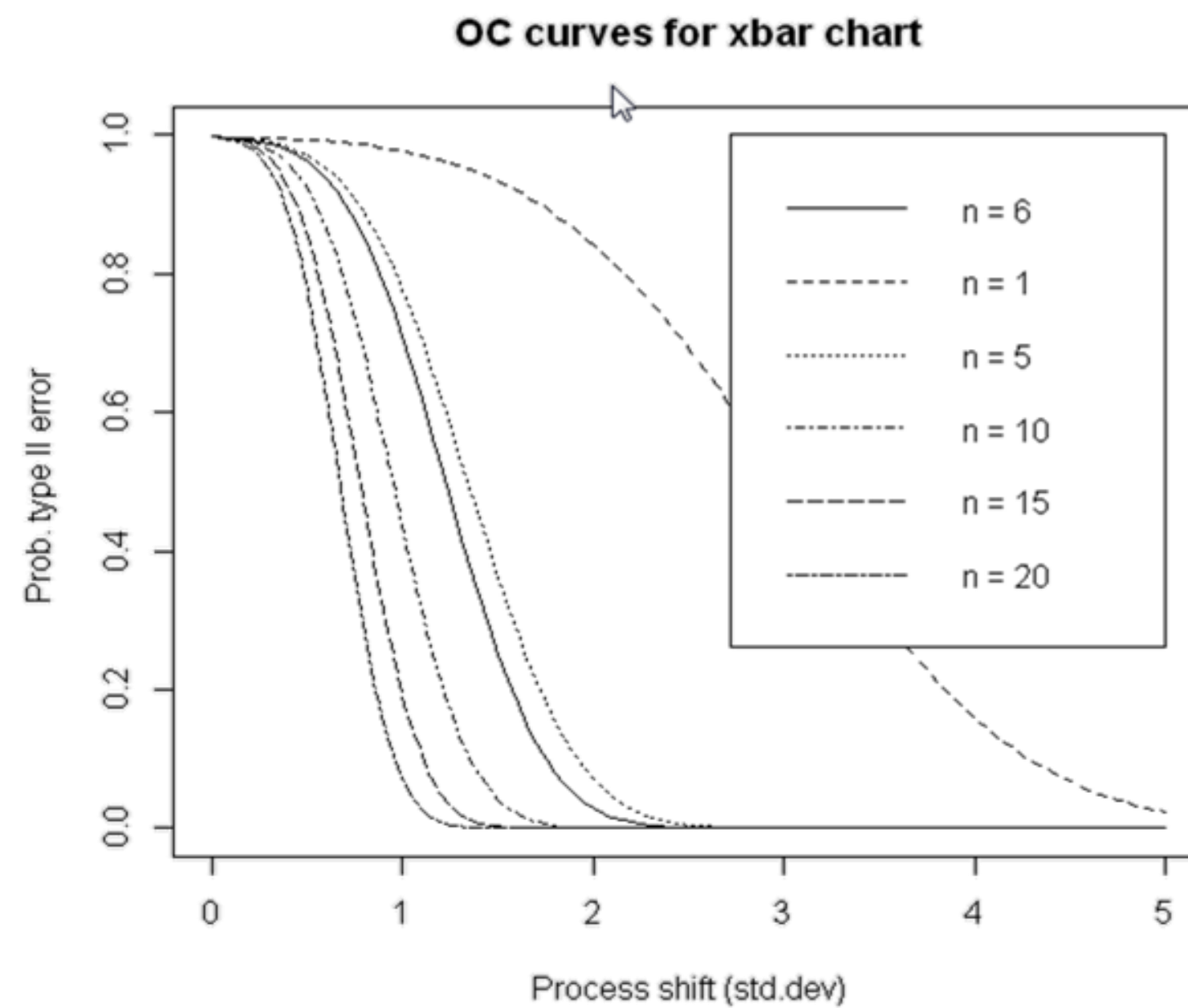
# Capability diagnostic chart



# Sixpack Analysis chart



# Operating Curves chart (OC)

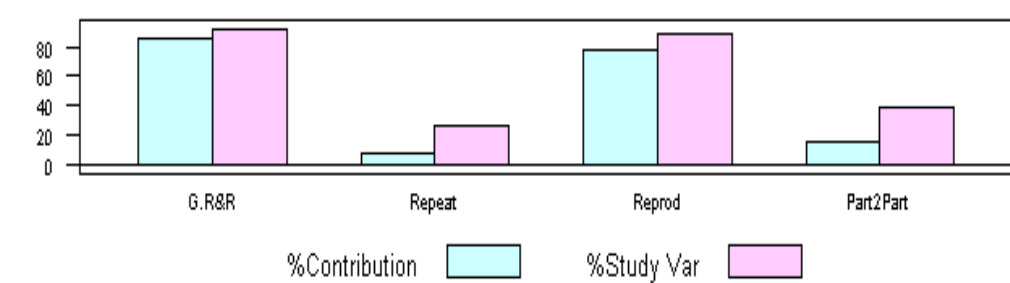




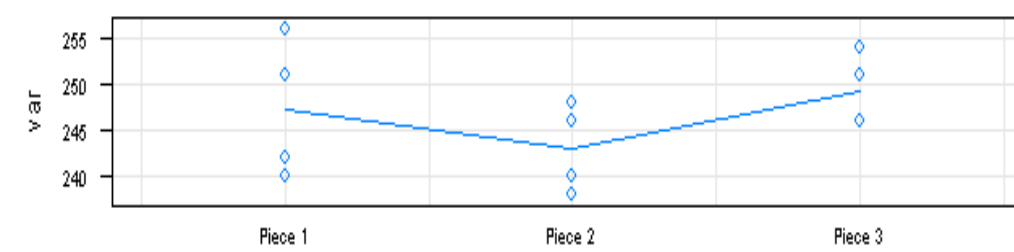
# R&R chart (Repeatability & Reproducibility chart)

## Six Sigma Gage R&R Study

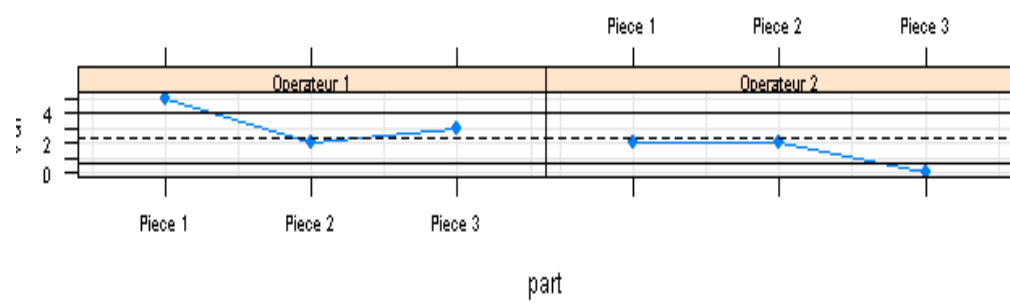
Components of Variation



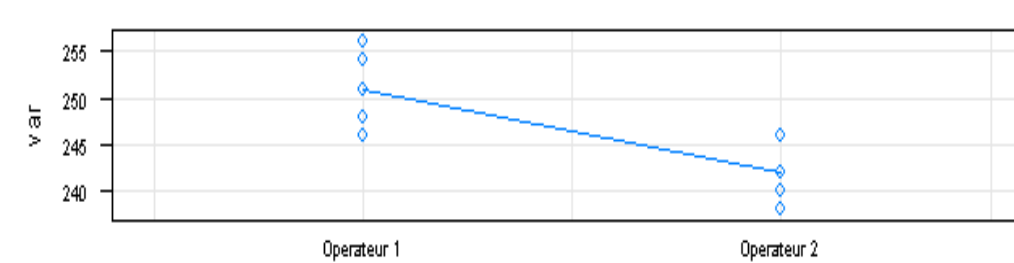
Var by Part



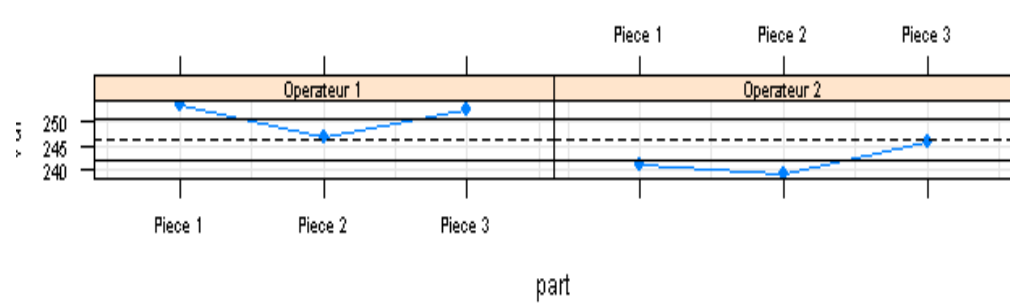
R Chart by appraiser



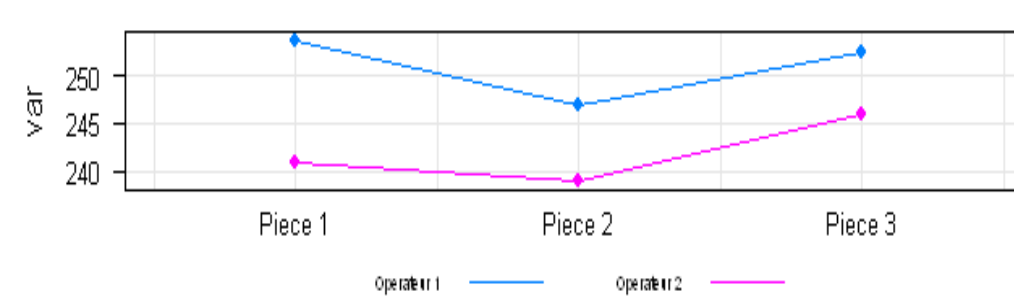
Var by appraiser



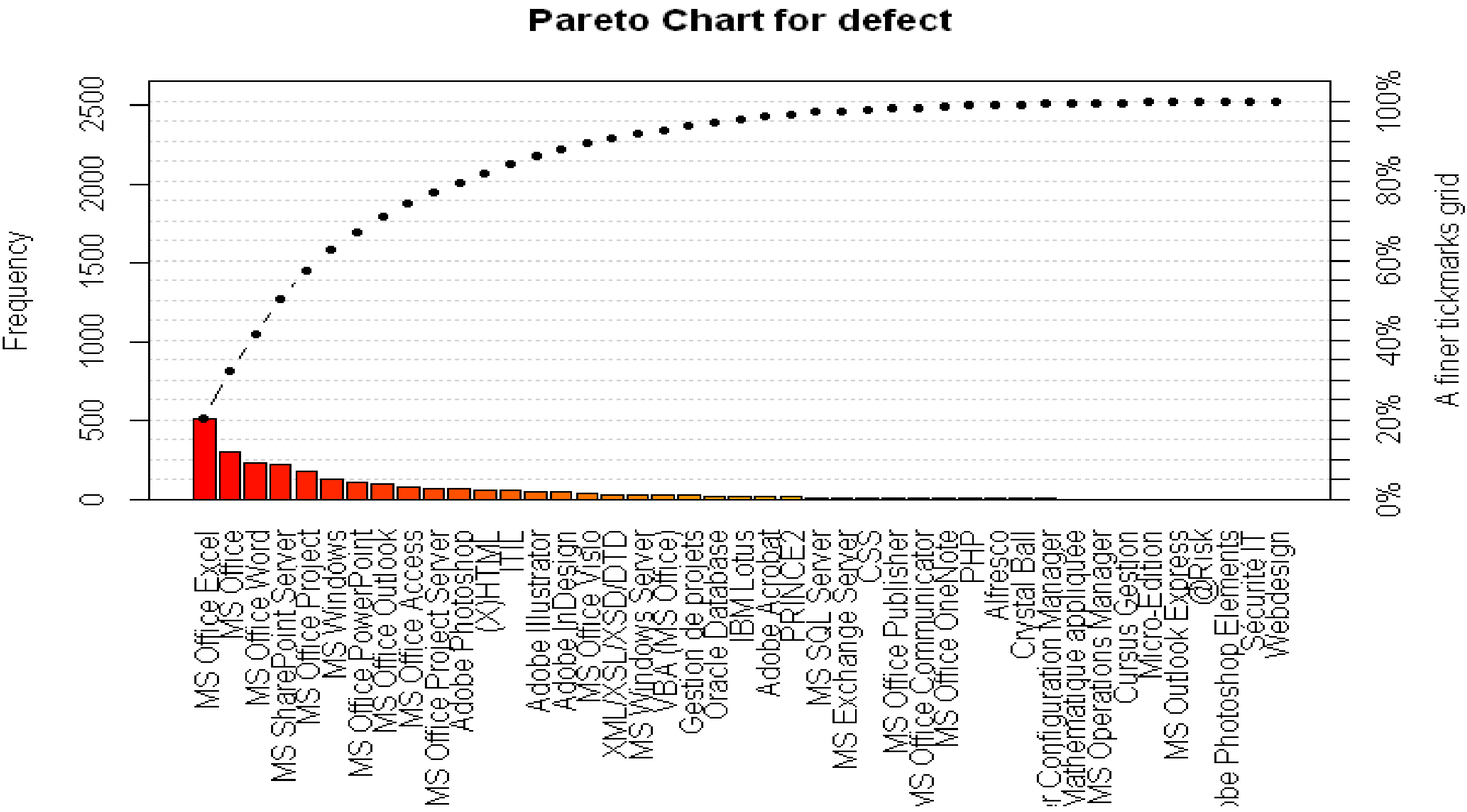
$\bar{x}$  Chart by appraiser



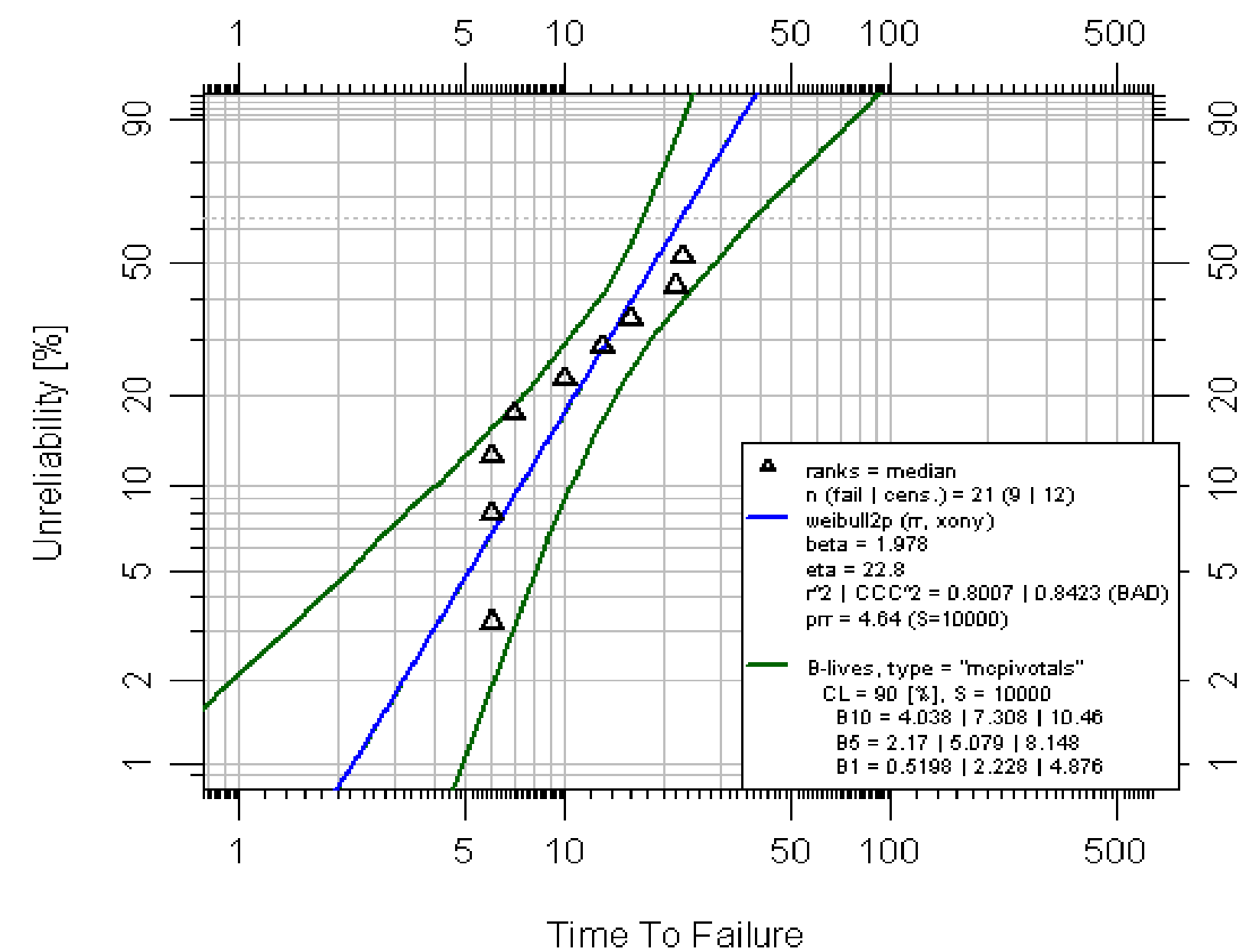
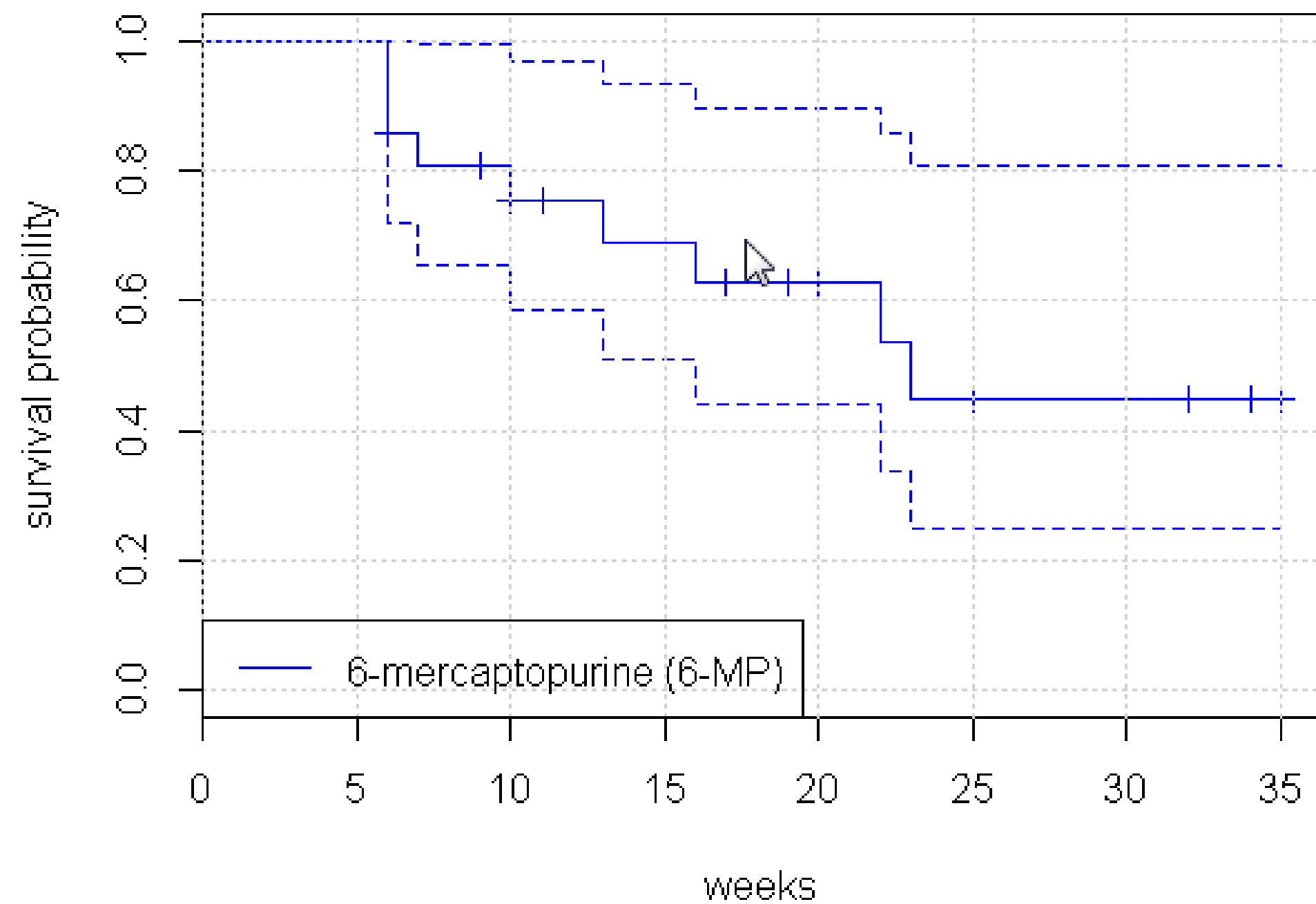
Part\*appraiser Interaction



# Pareto chart



# Survival and Fiability chart



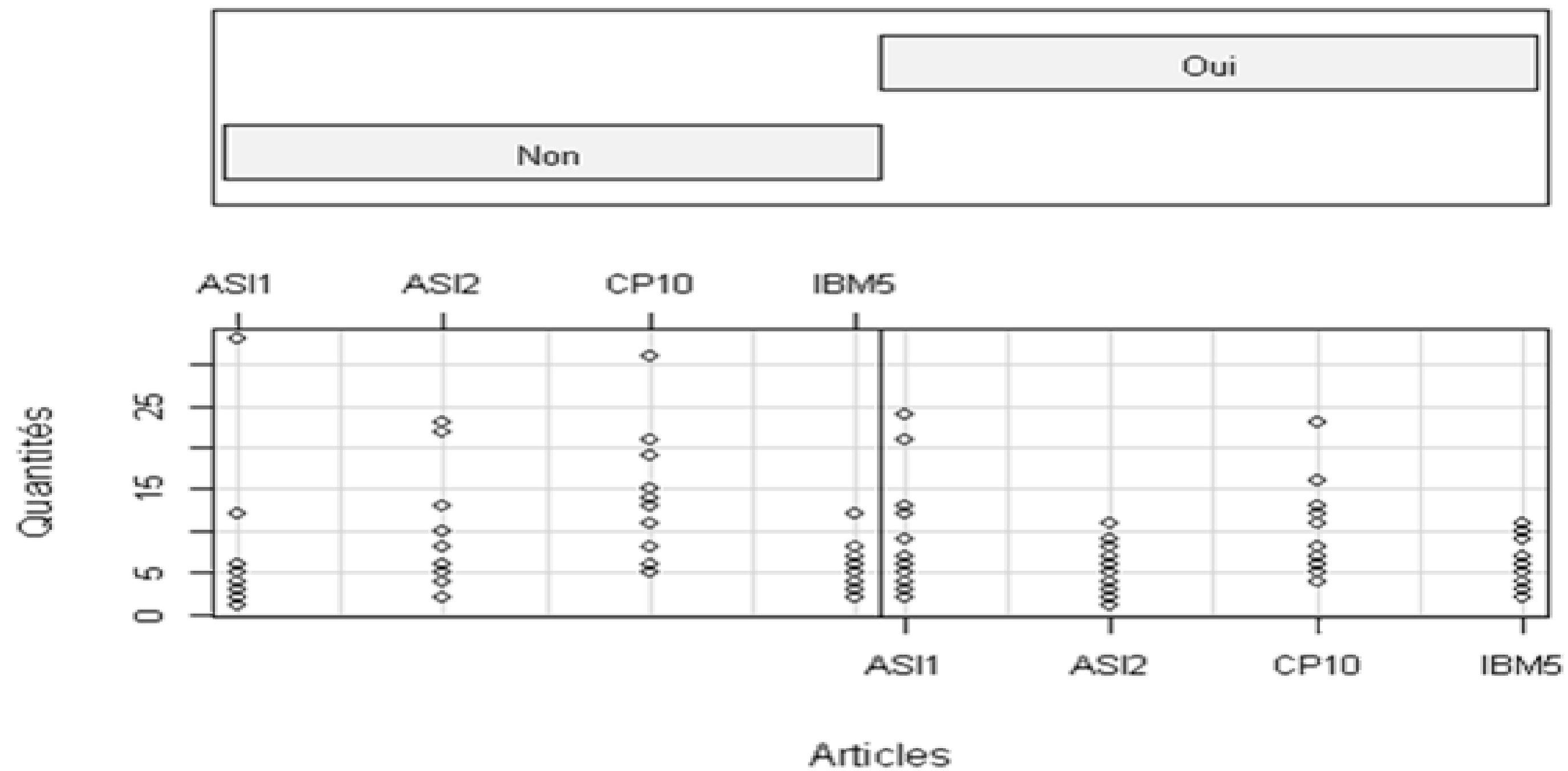
Texts/Categories

# Text cloud chart

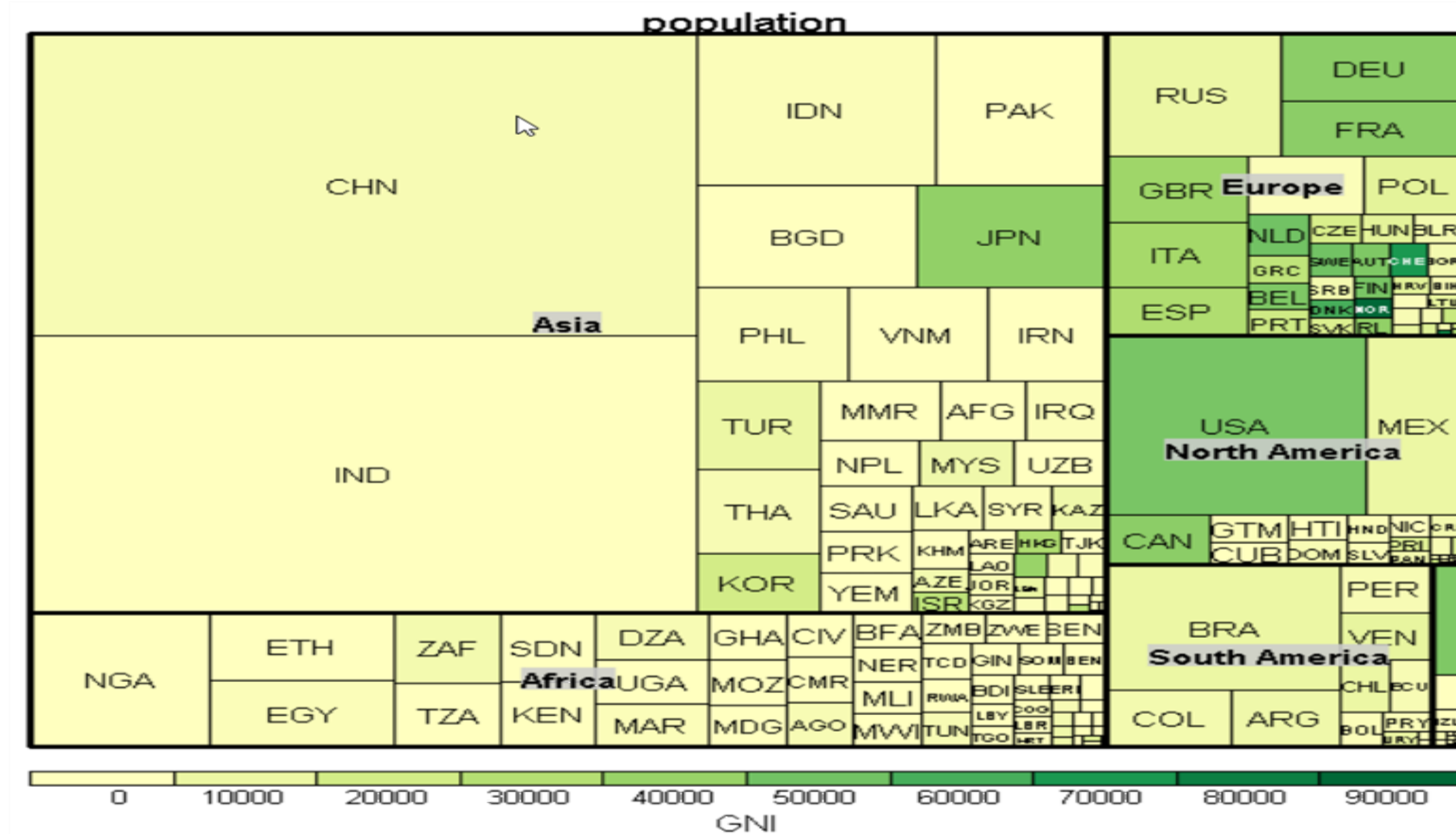


# Co-diagram chart

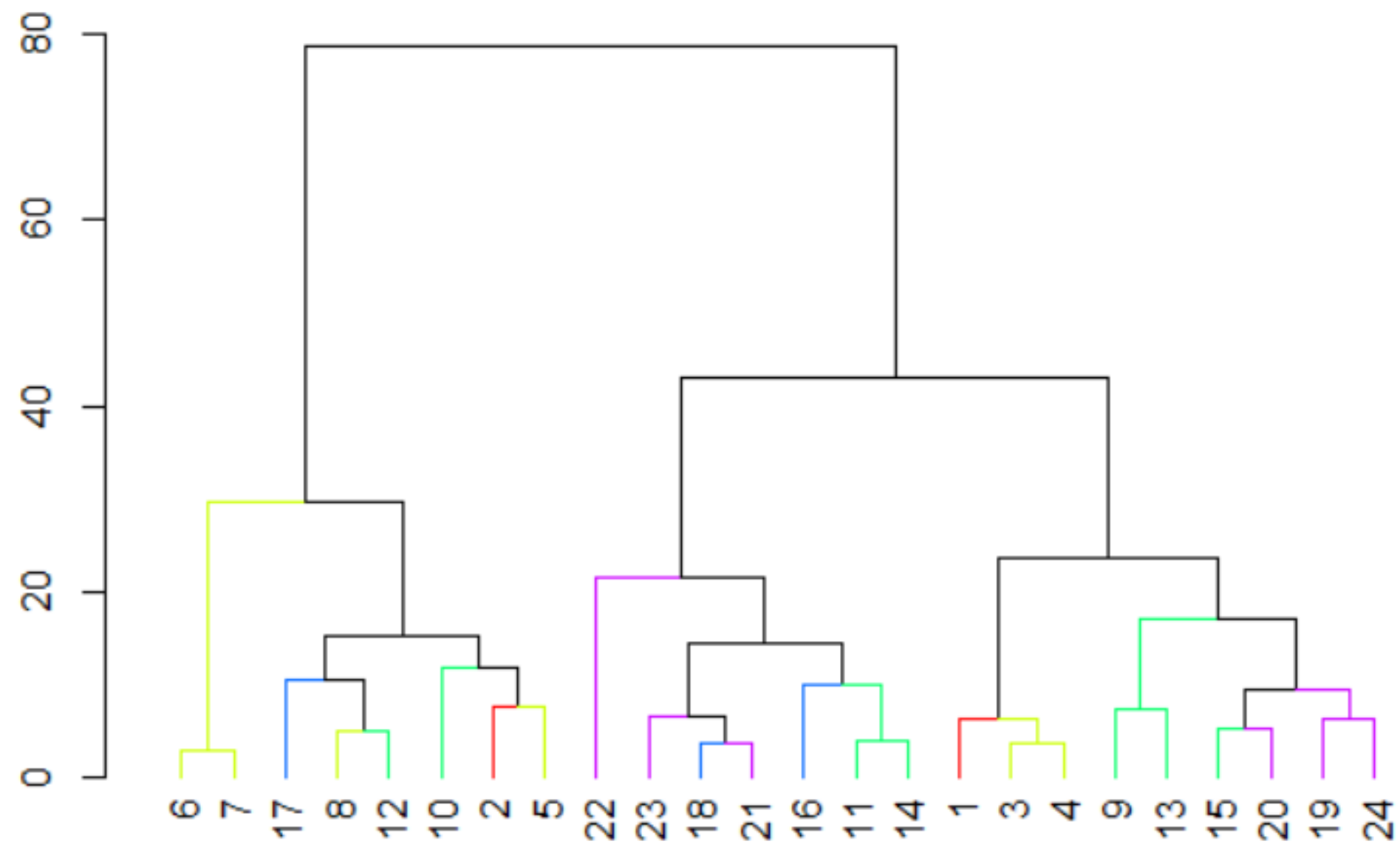
Given : mydata\$FacturePayee



# Treemap chart

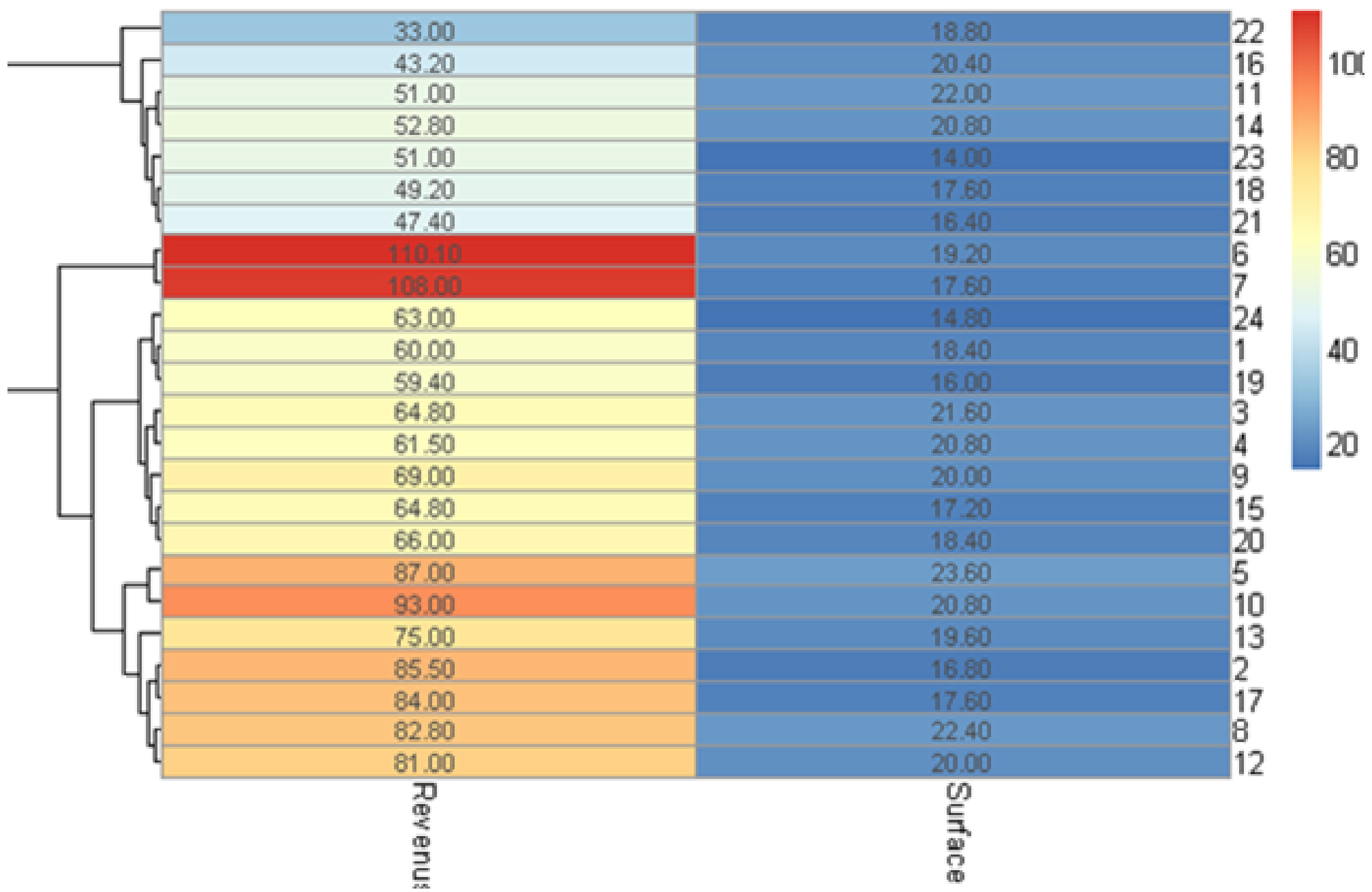
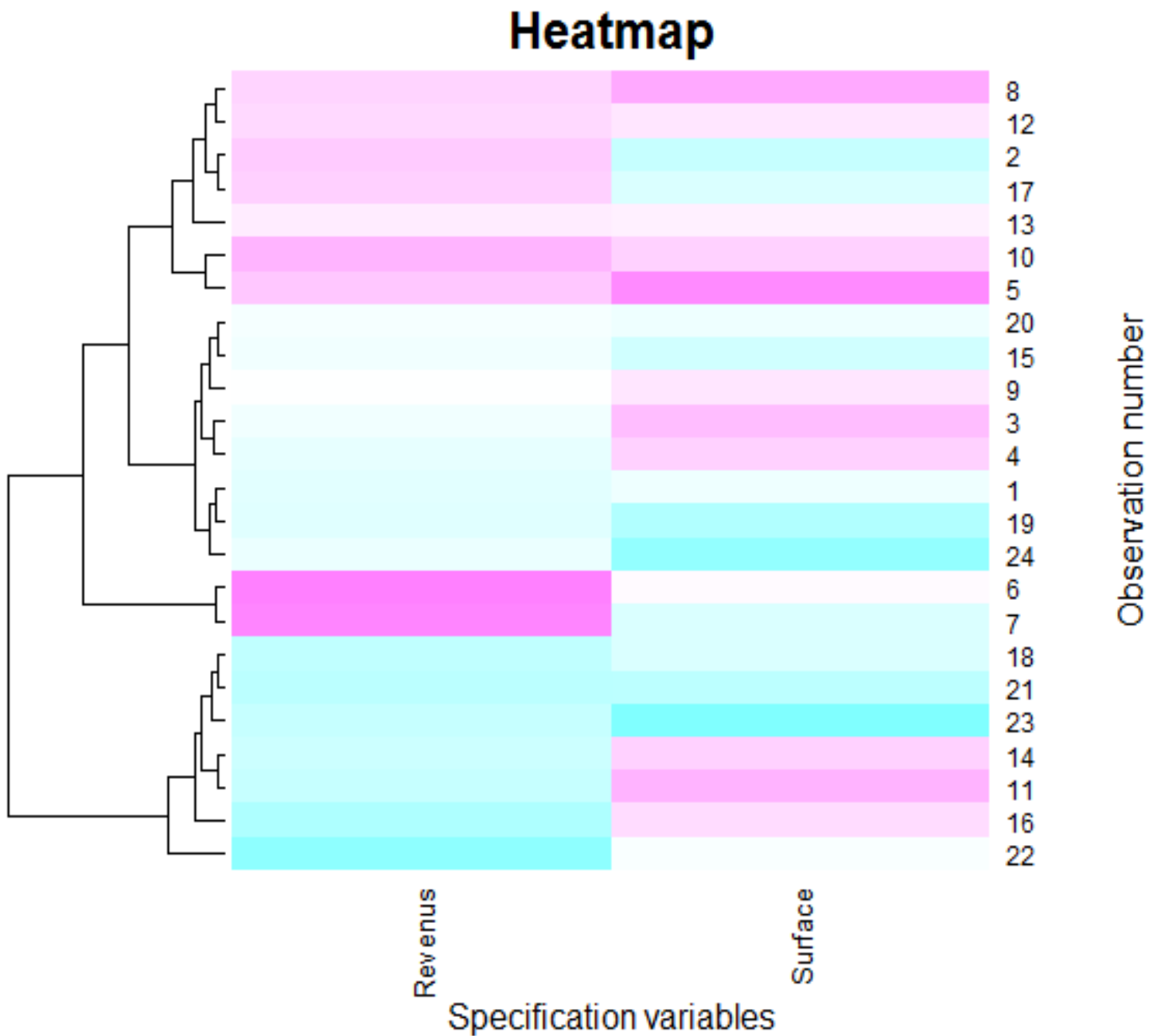


# Dendrogram chart



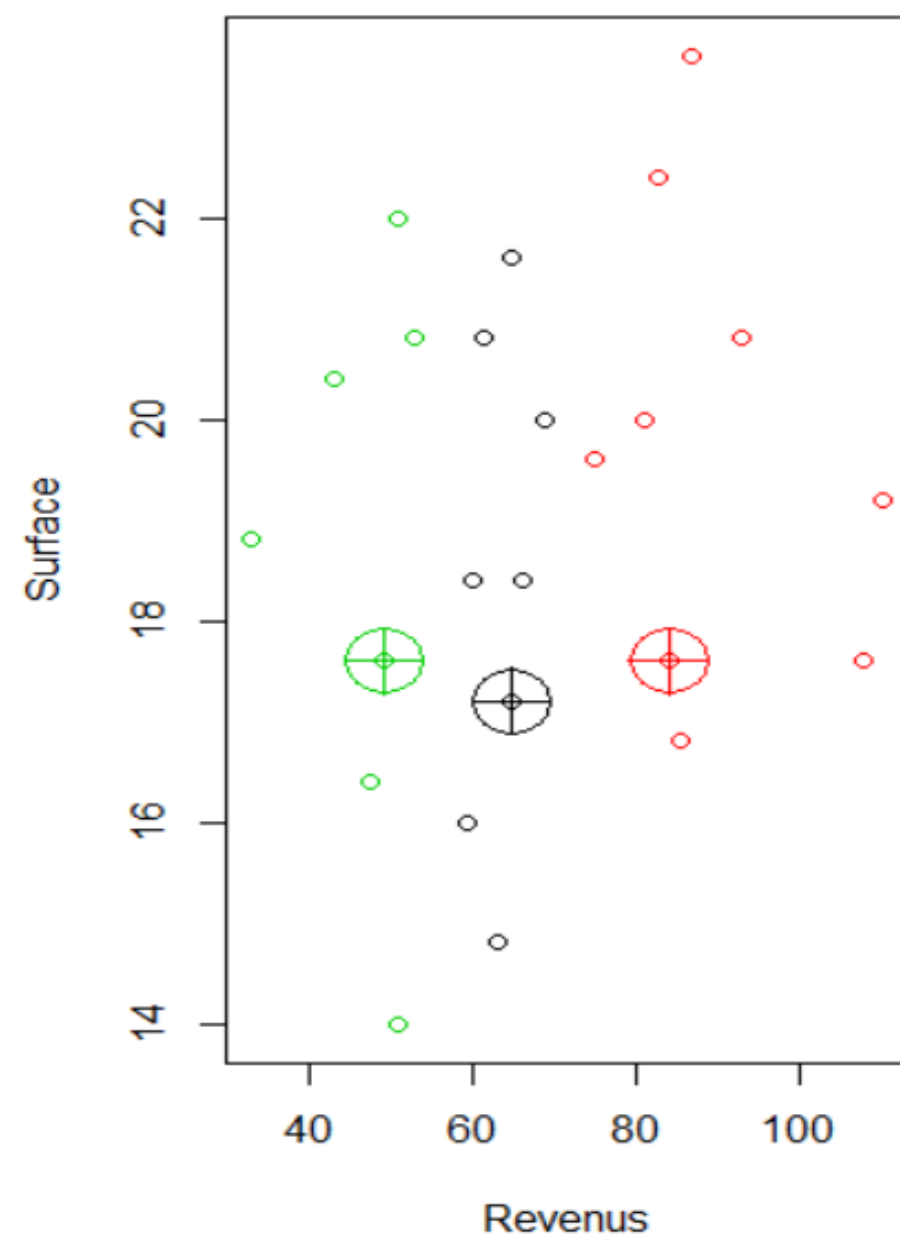


# Clustering Heat Map chart

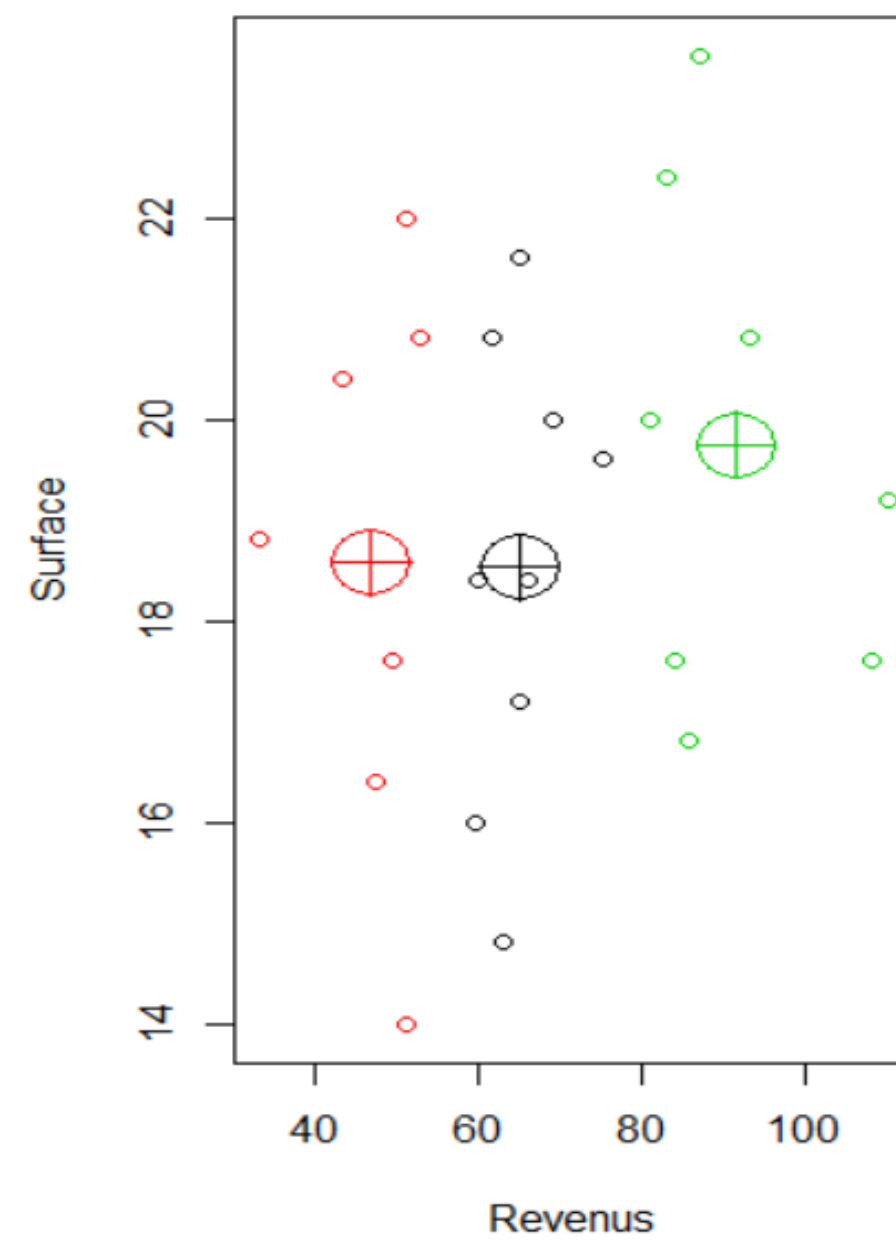


# Classification charts (k-means, k-medoids, Support Vector Machine)

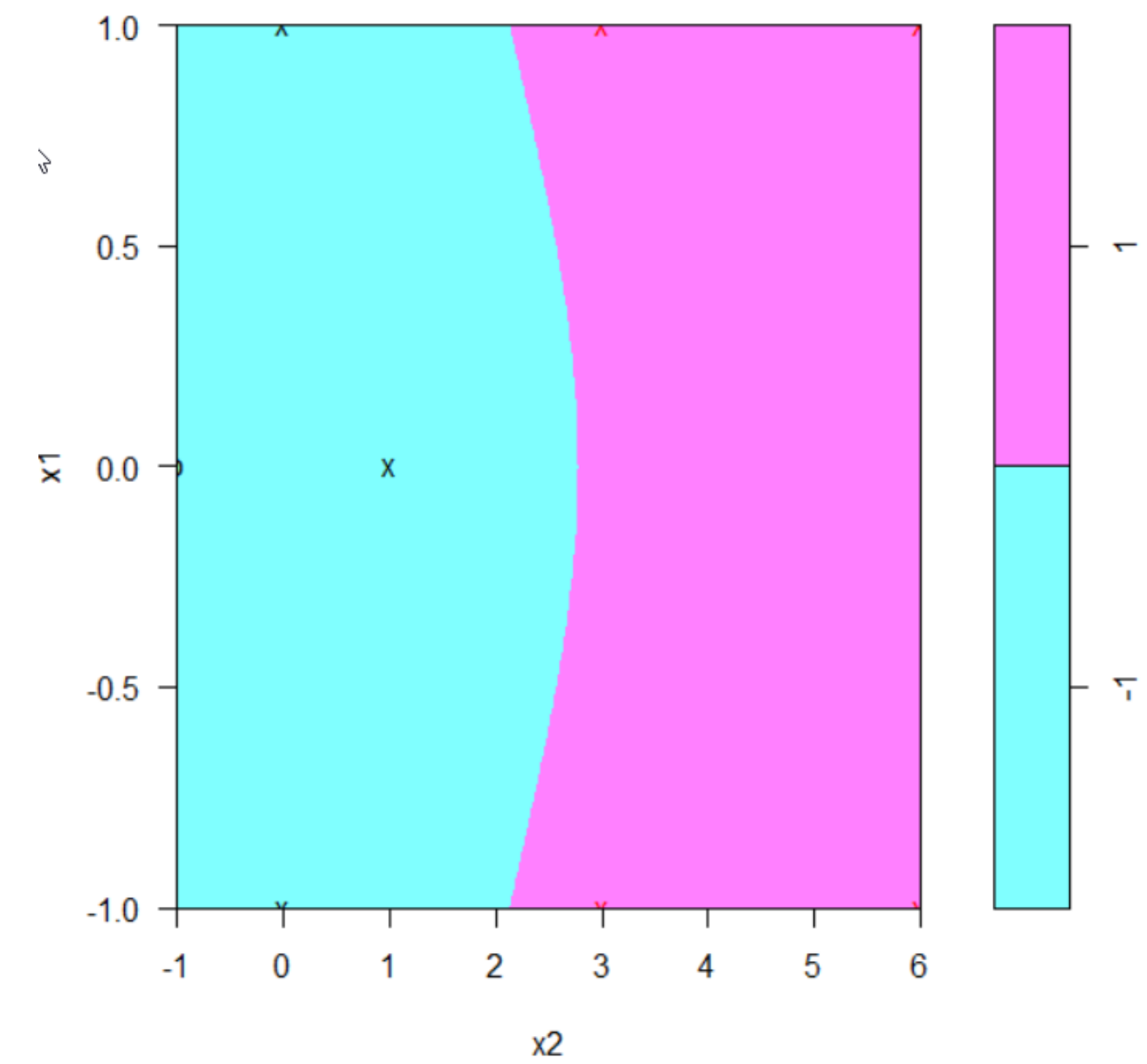
**Kmedoids Cluster**



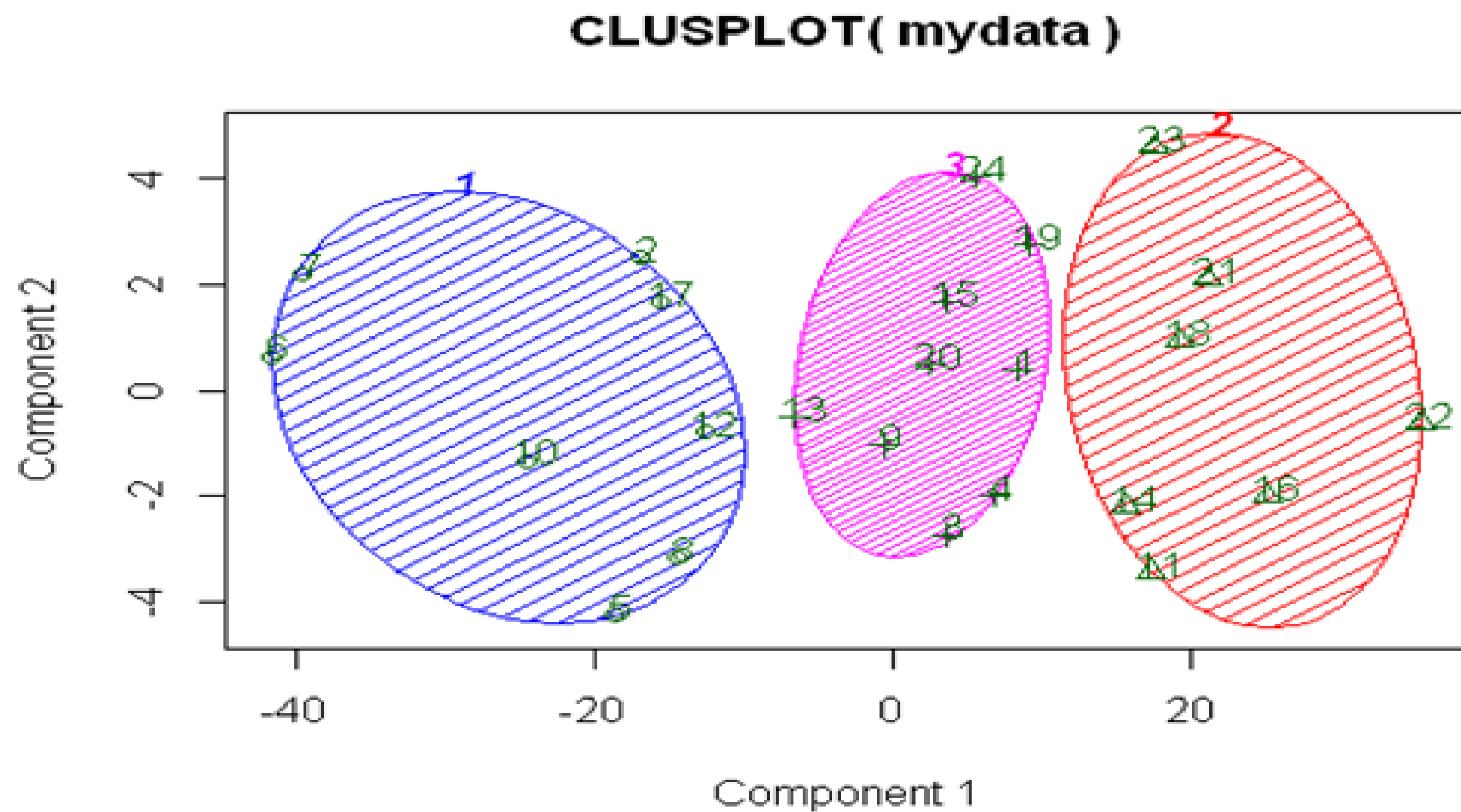
**Kmeans Cluster**



**SVM classification plot**

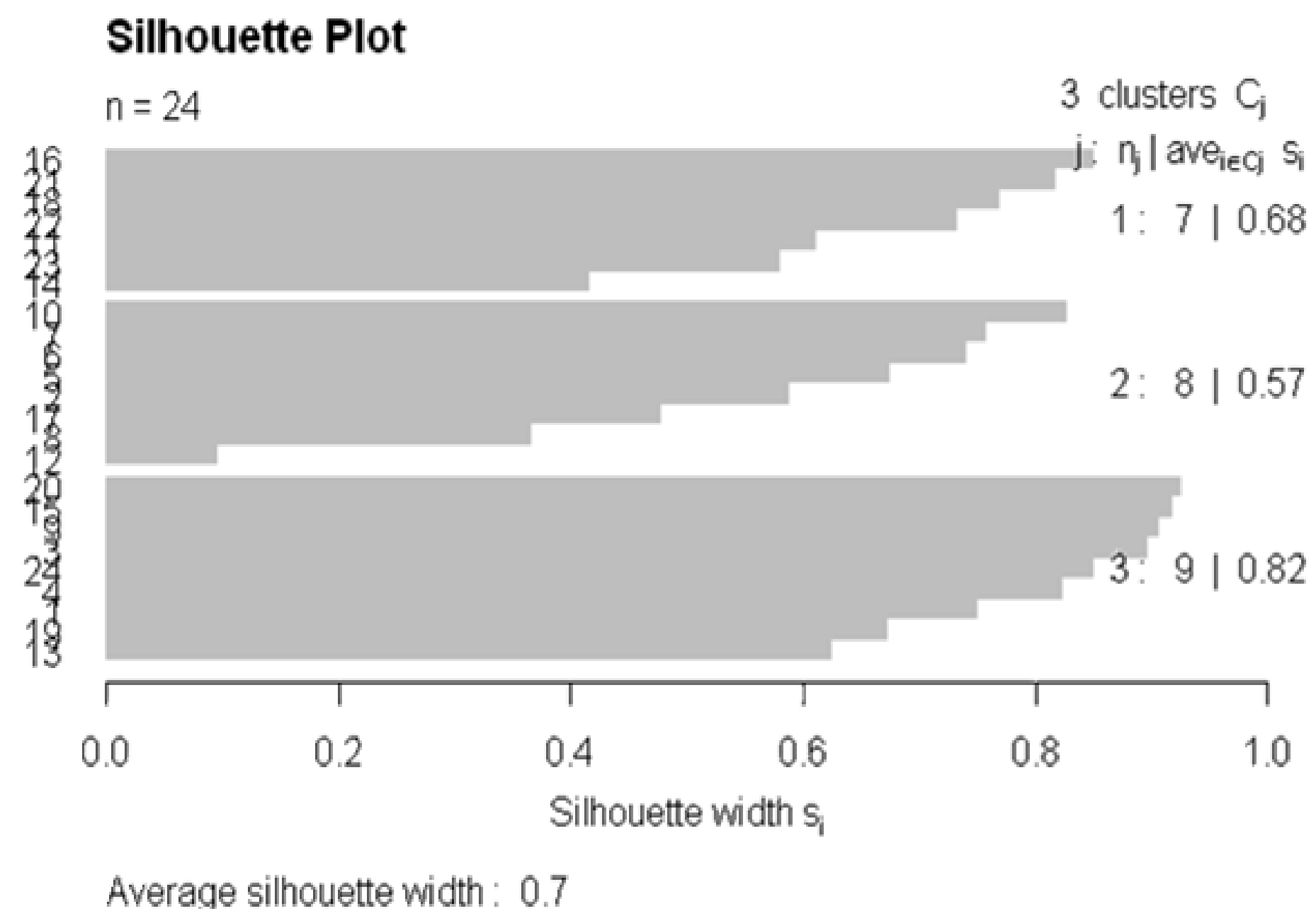


## Clusters chart

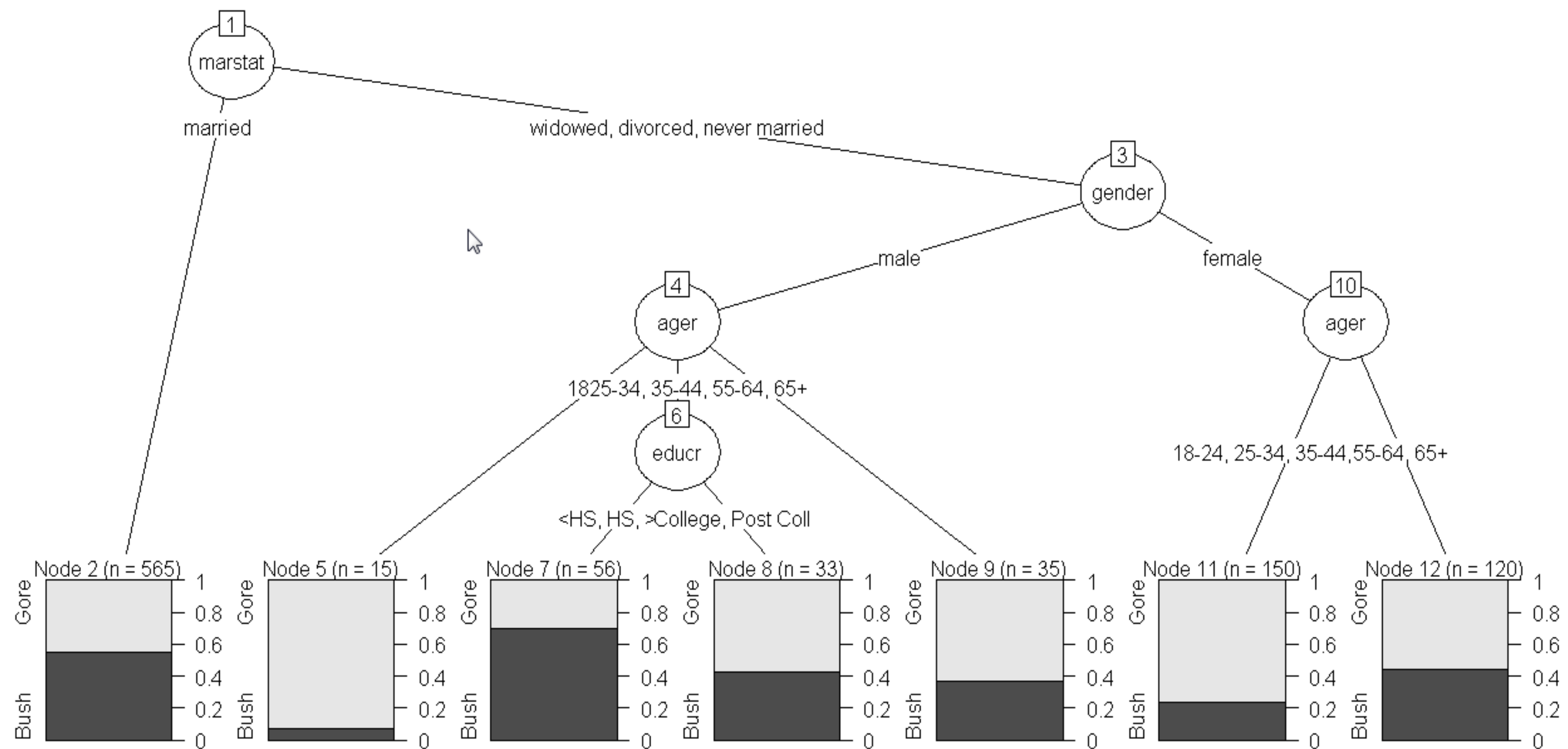


These two components explain 100 % of the point variability.

# Silhouettes chart

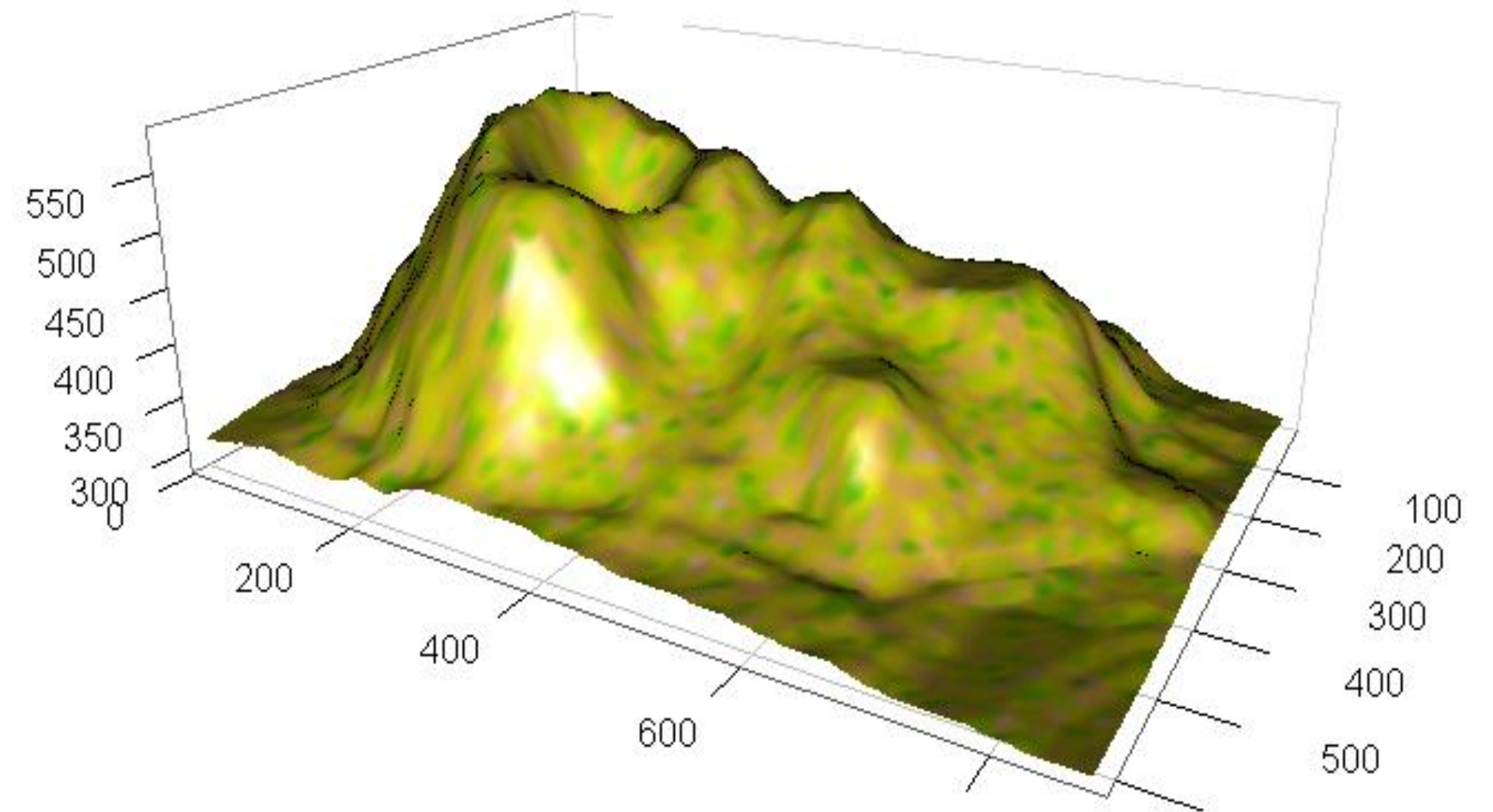
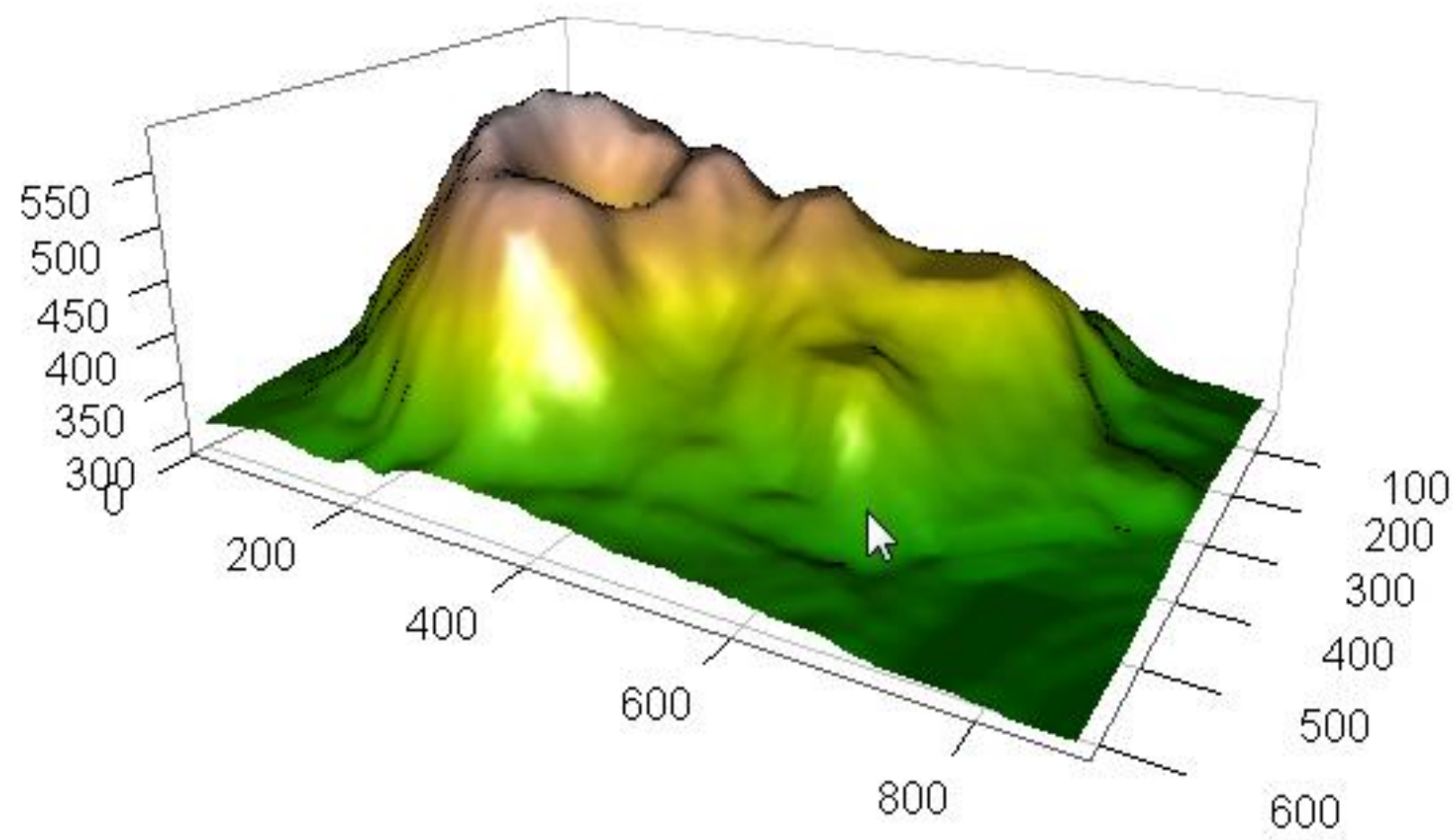


# Decision Tree chart



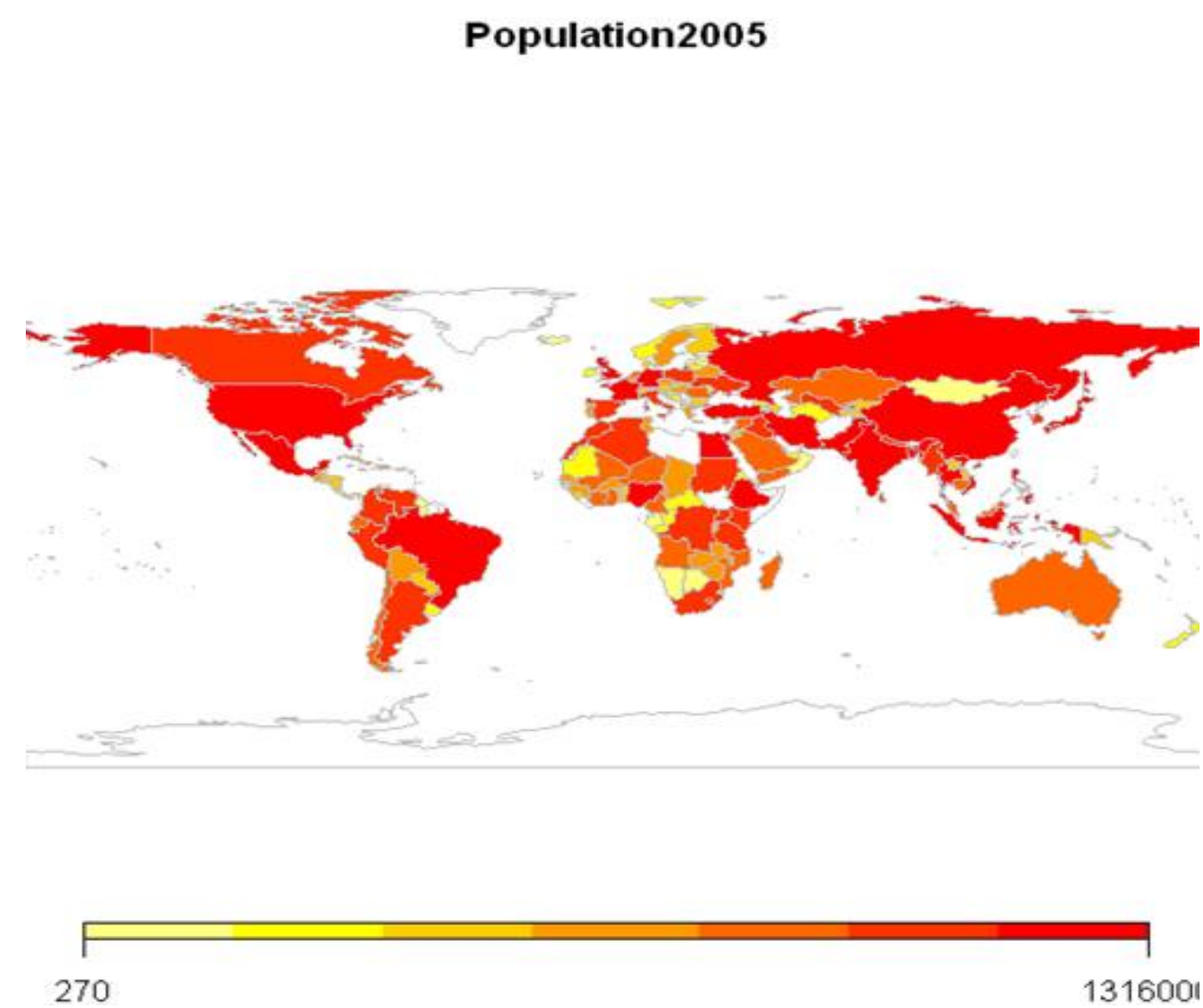
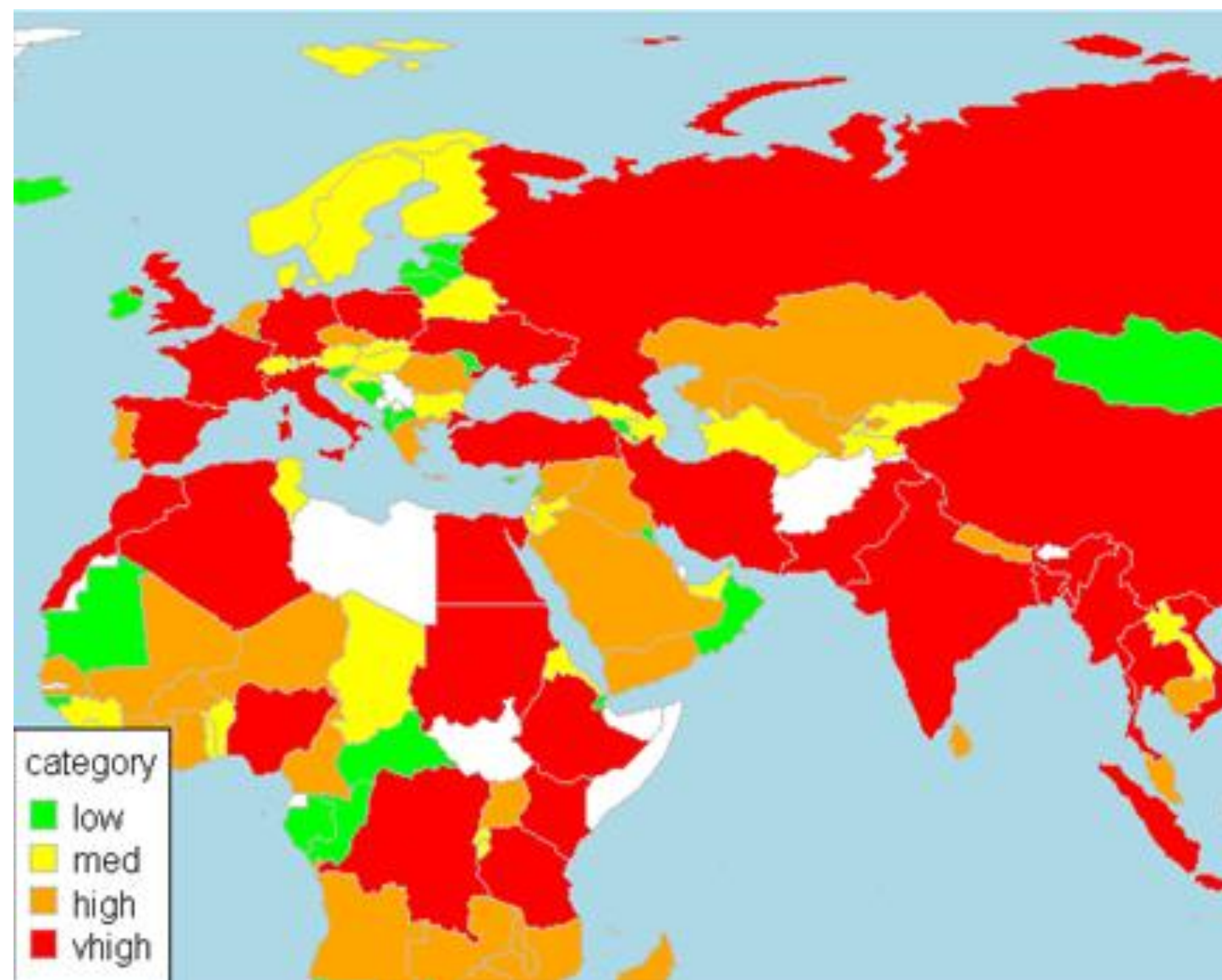
# Géostatistiques/SIG

# Topographic Map chart





# Choroplethes Map chart

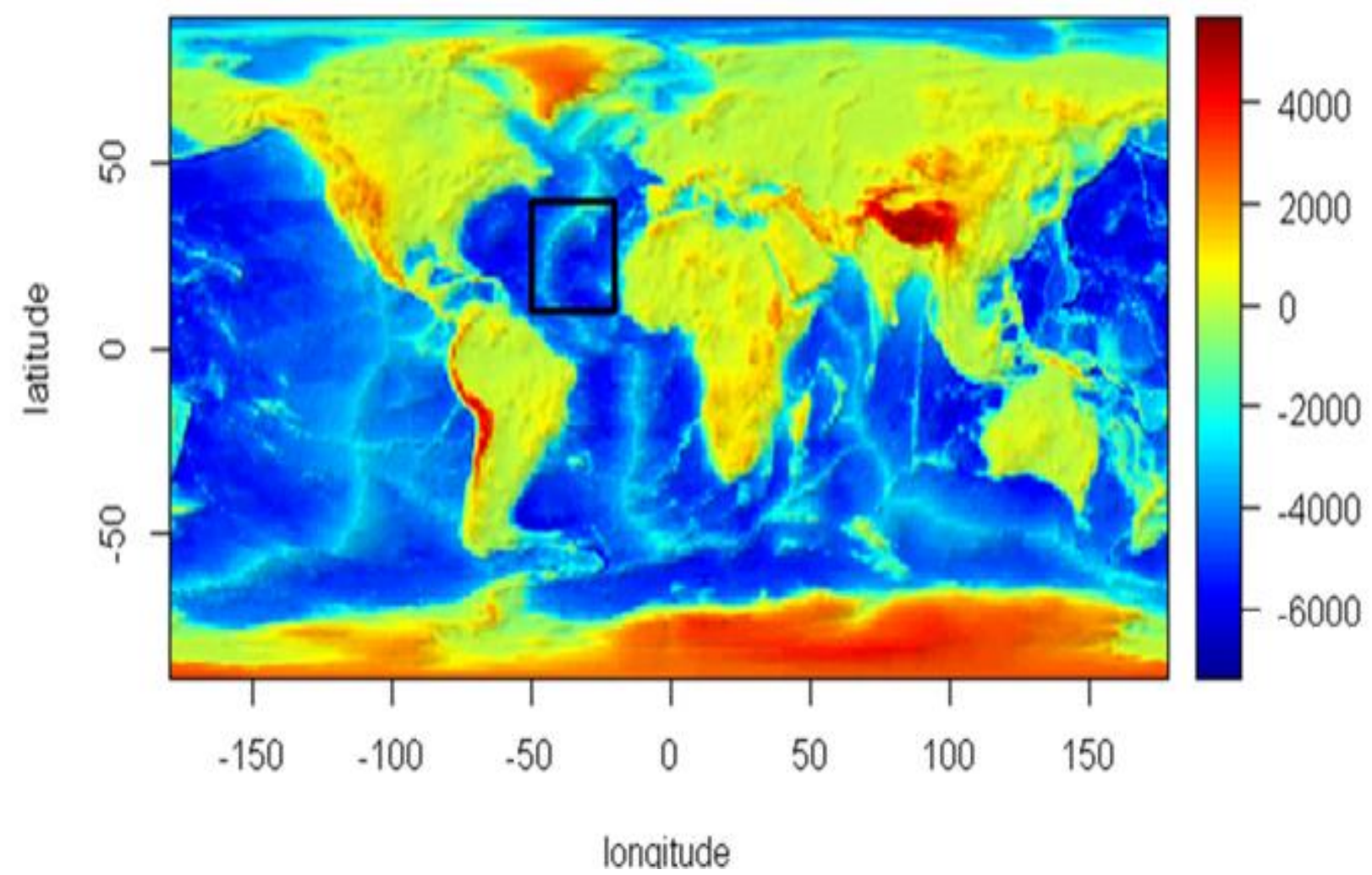




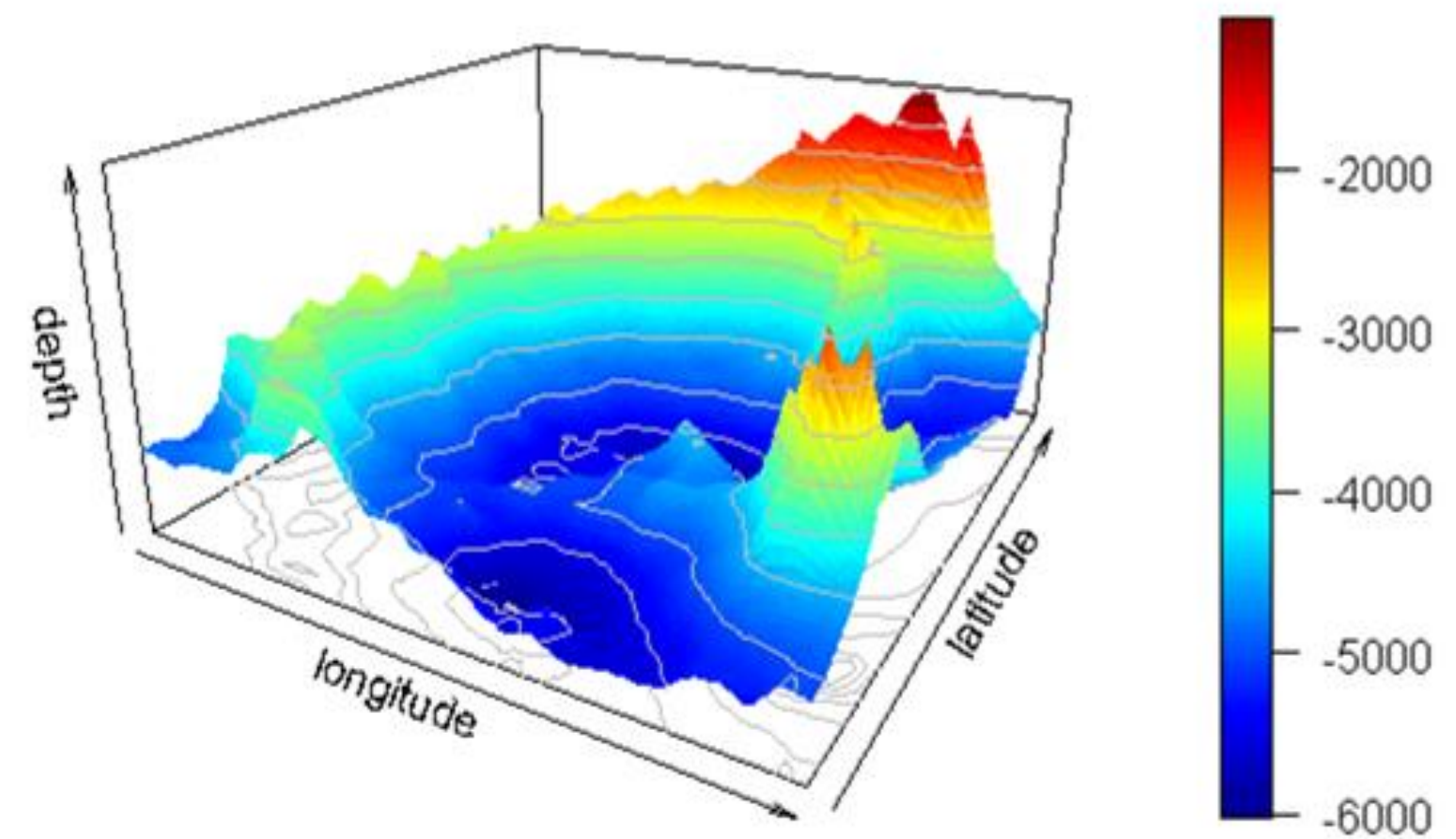
# Hypsometric Map charts

Hypsometry data set

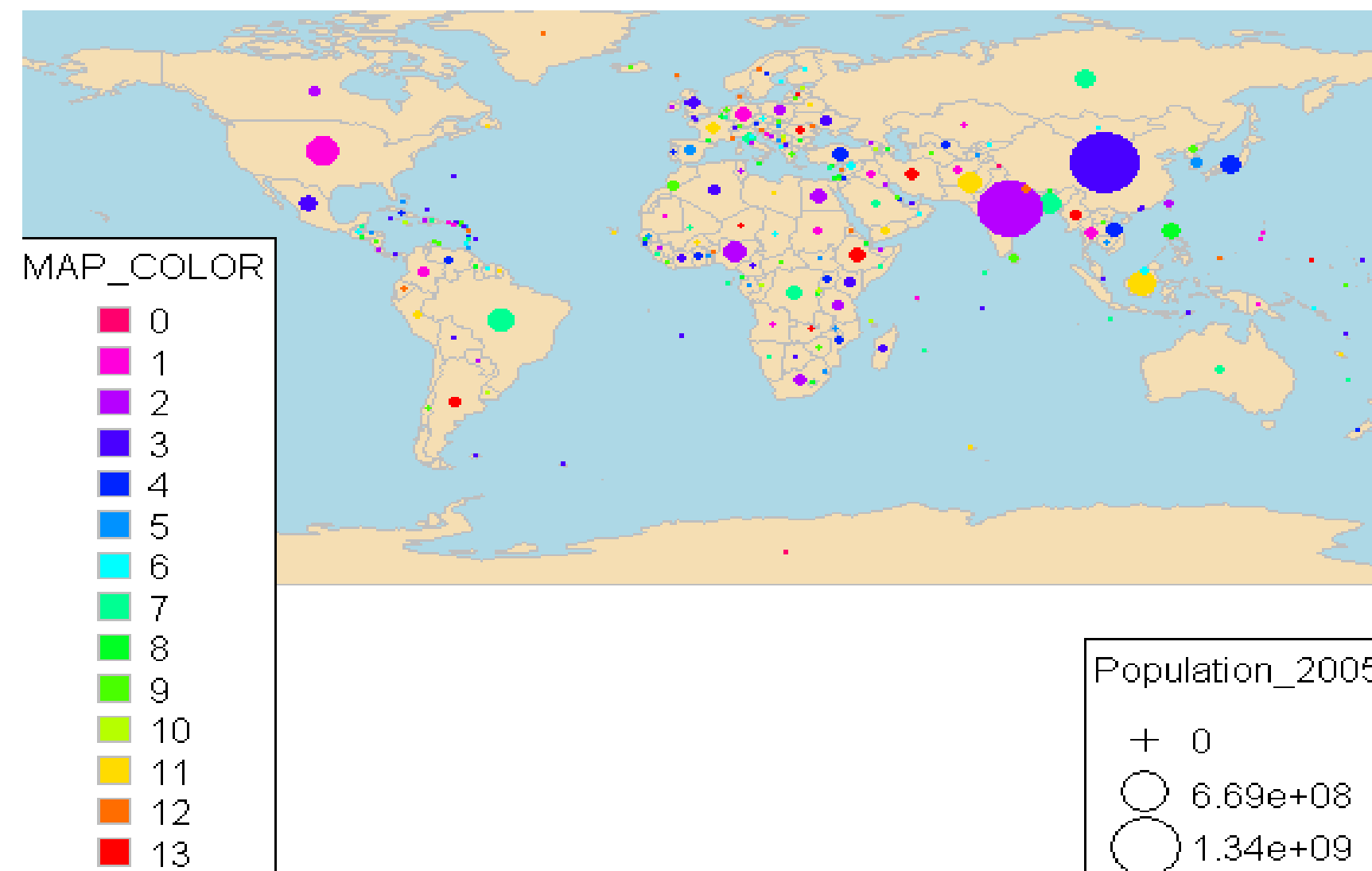
[m]



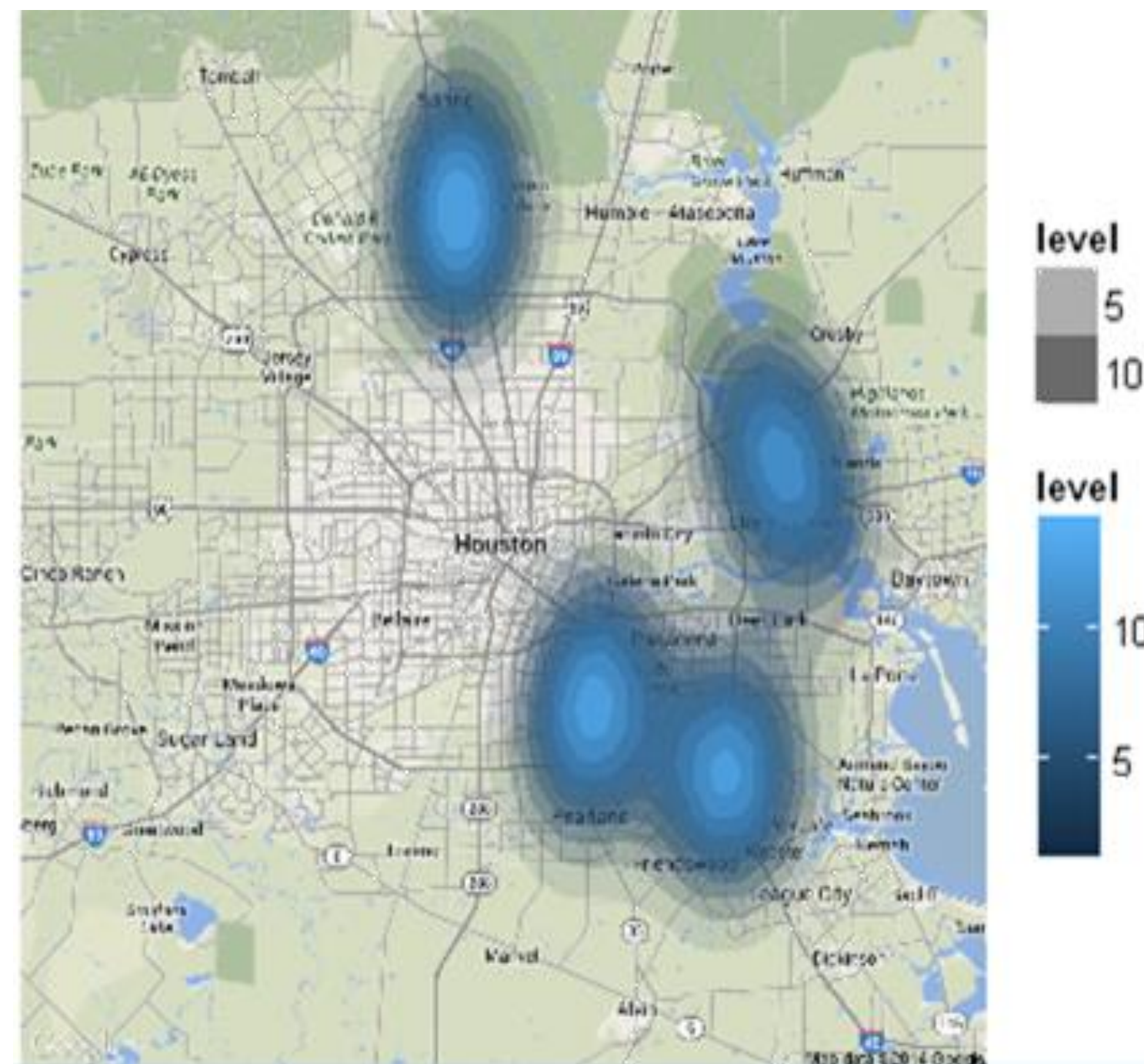
depth [m]



# Proportional symbols Map chart

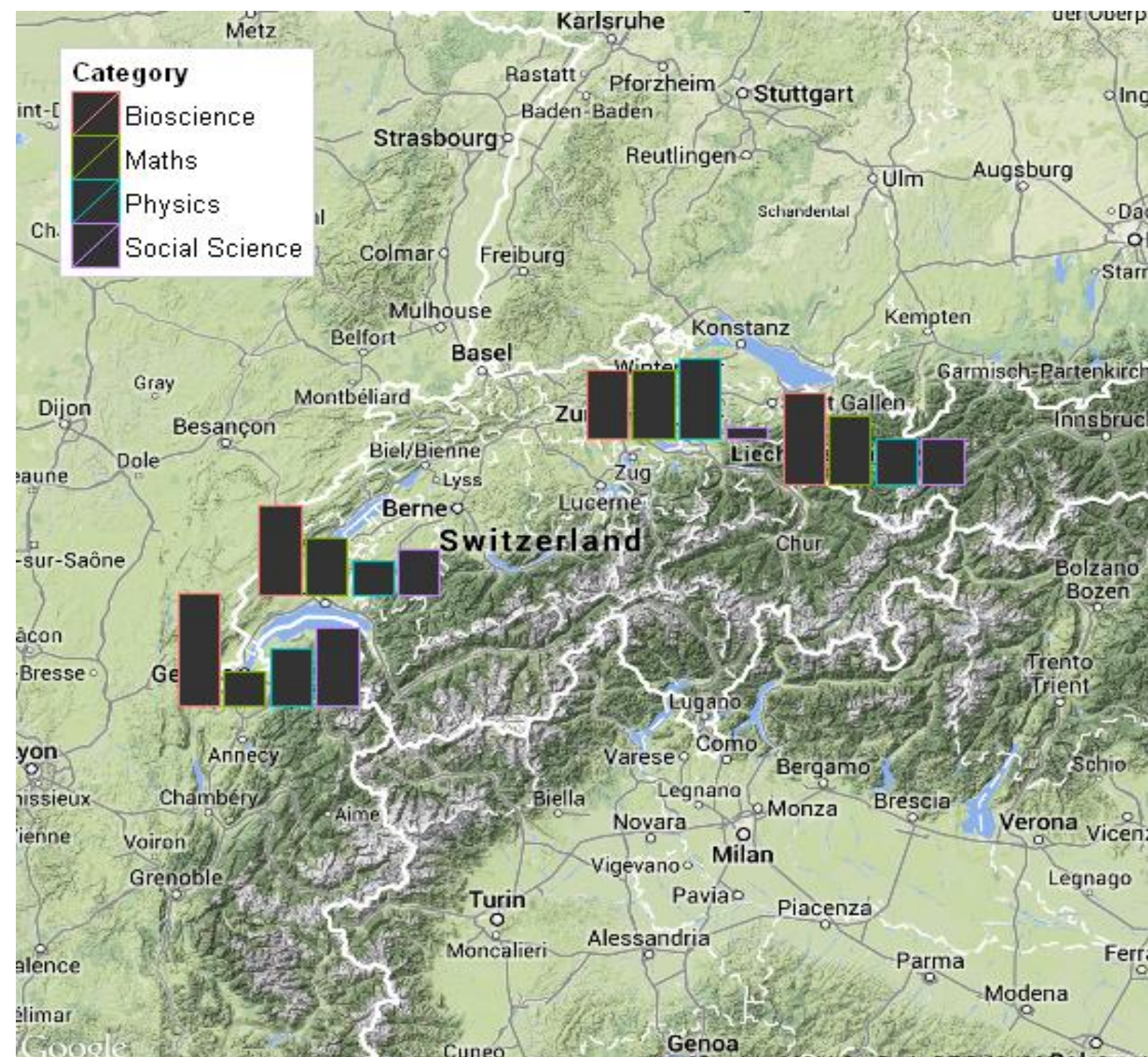


# Density Map chart



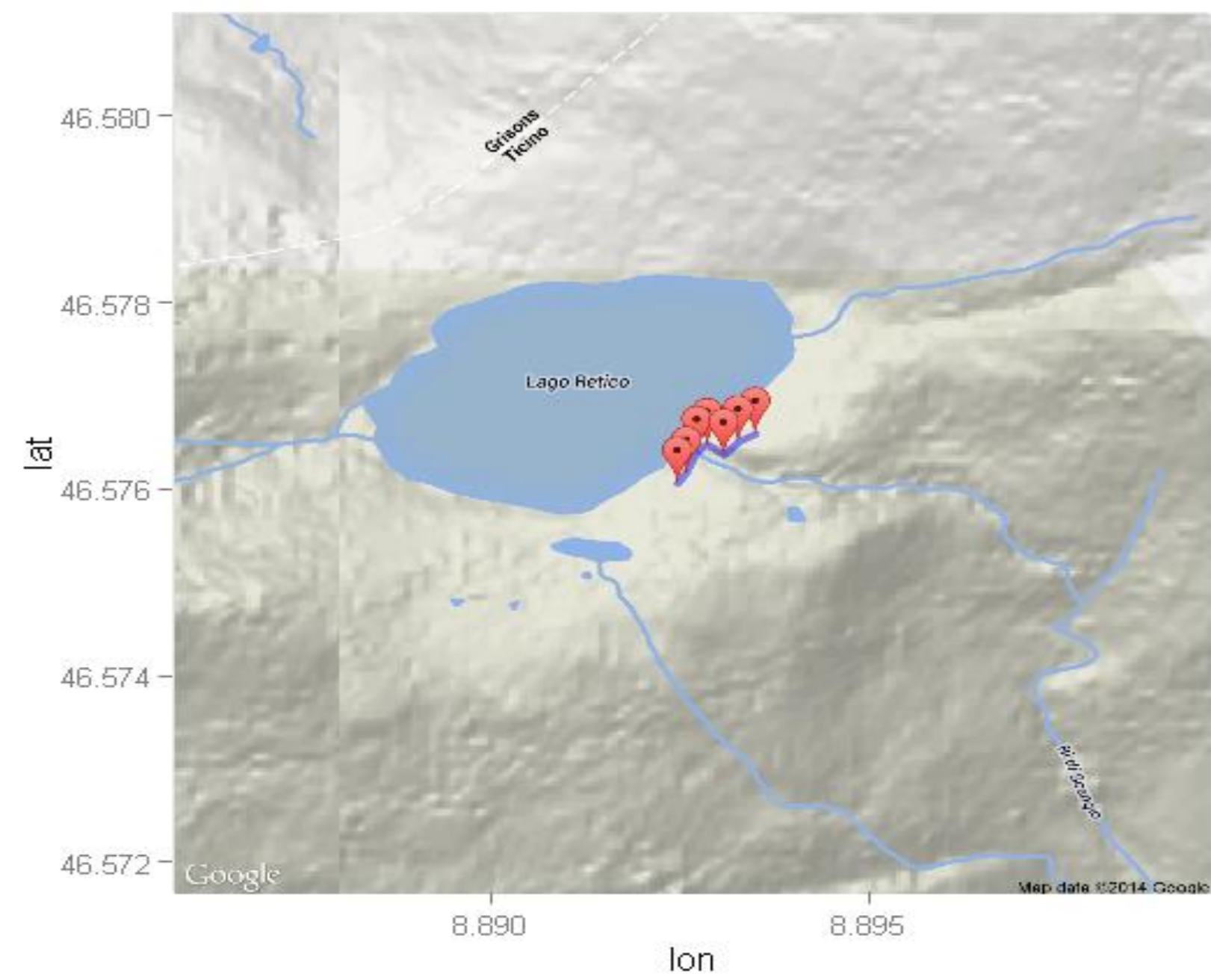


# Bar Map chart

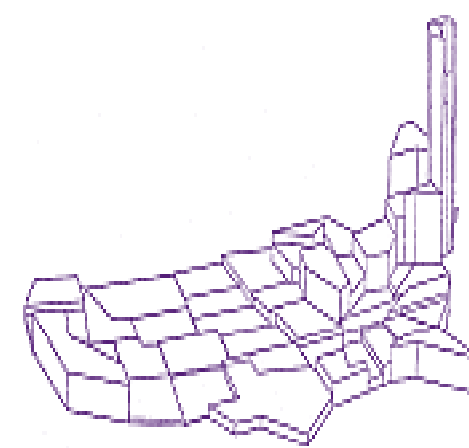
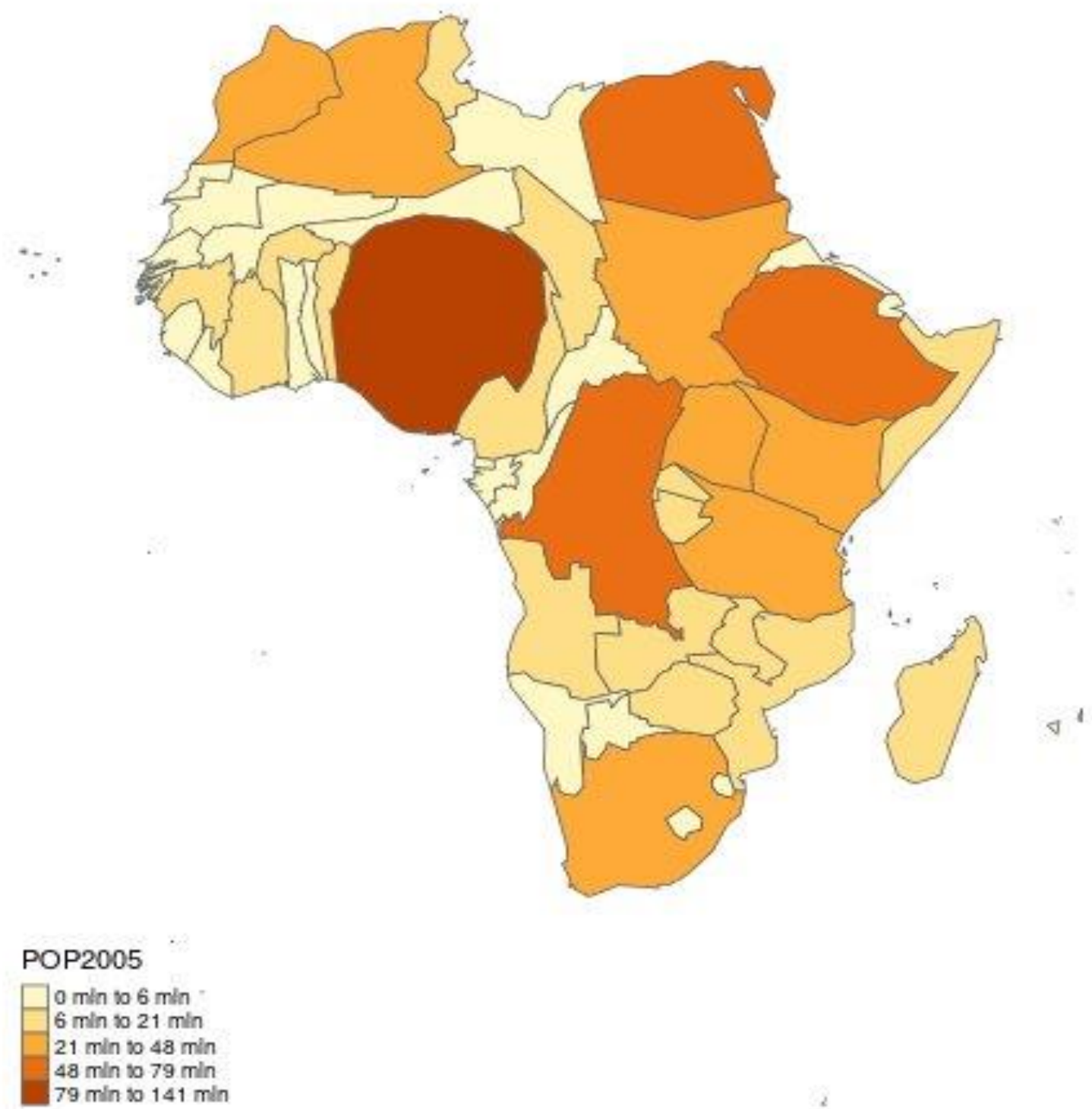




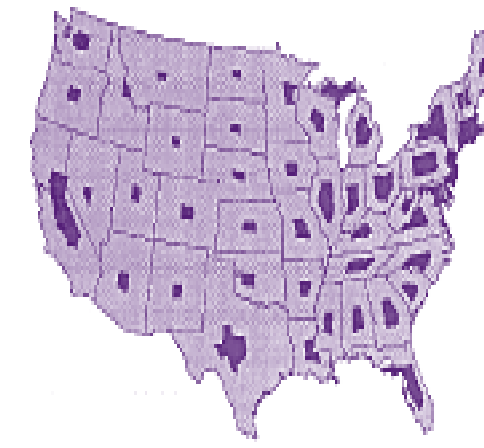
# Path Map chart



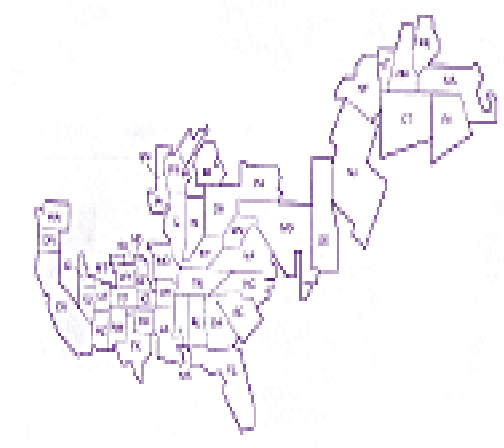
# Cartogram chart



(a)



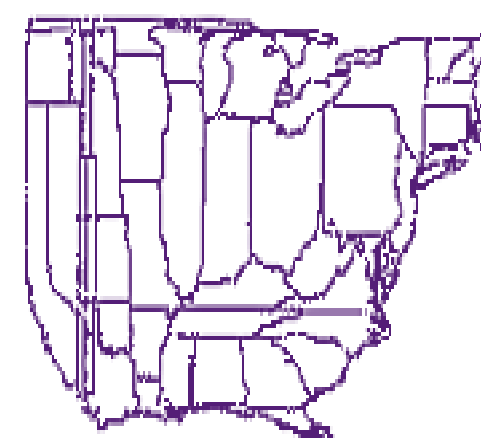
(b)



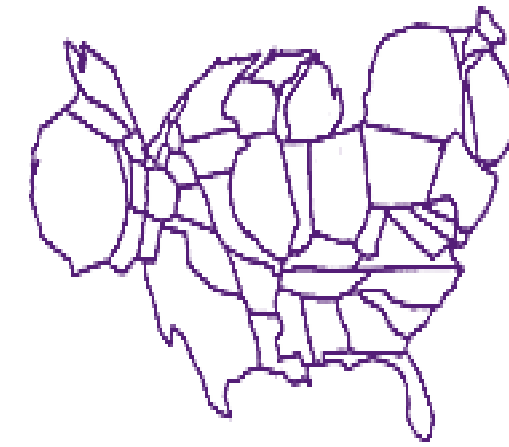
(c)



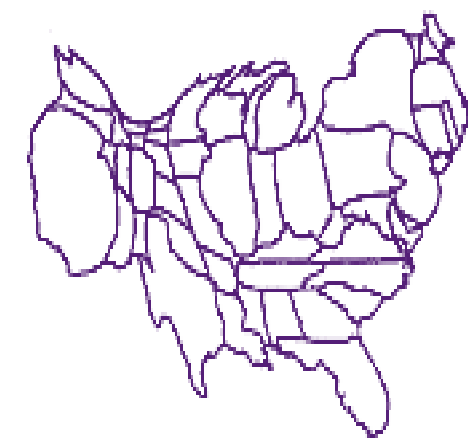
(d)



(e)



(f)

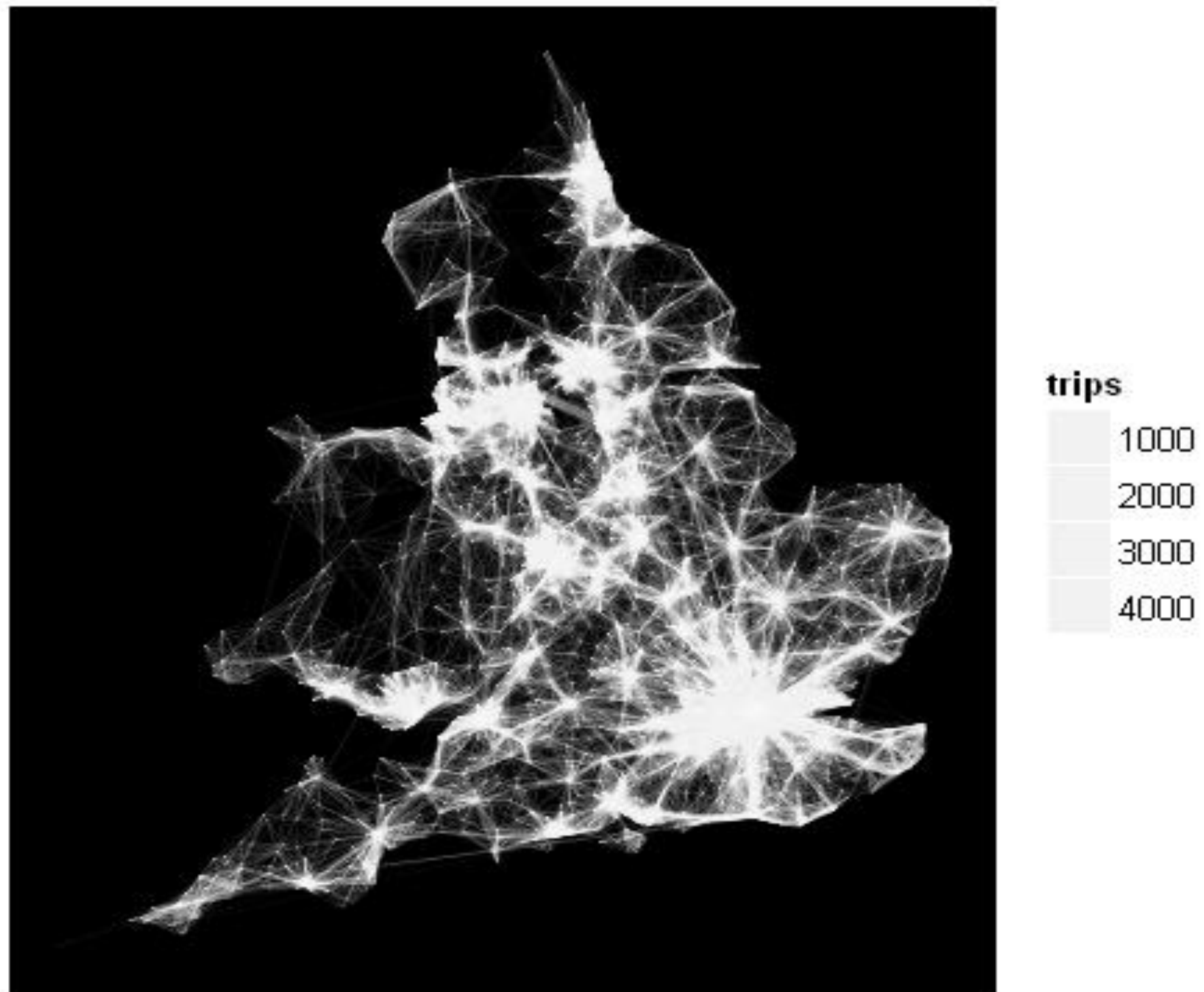


(g)

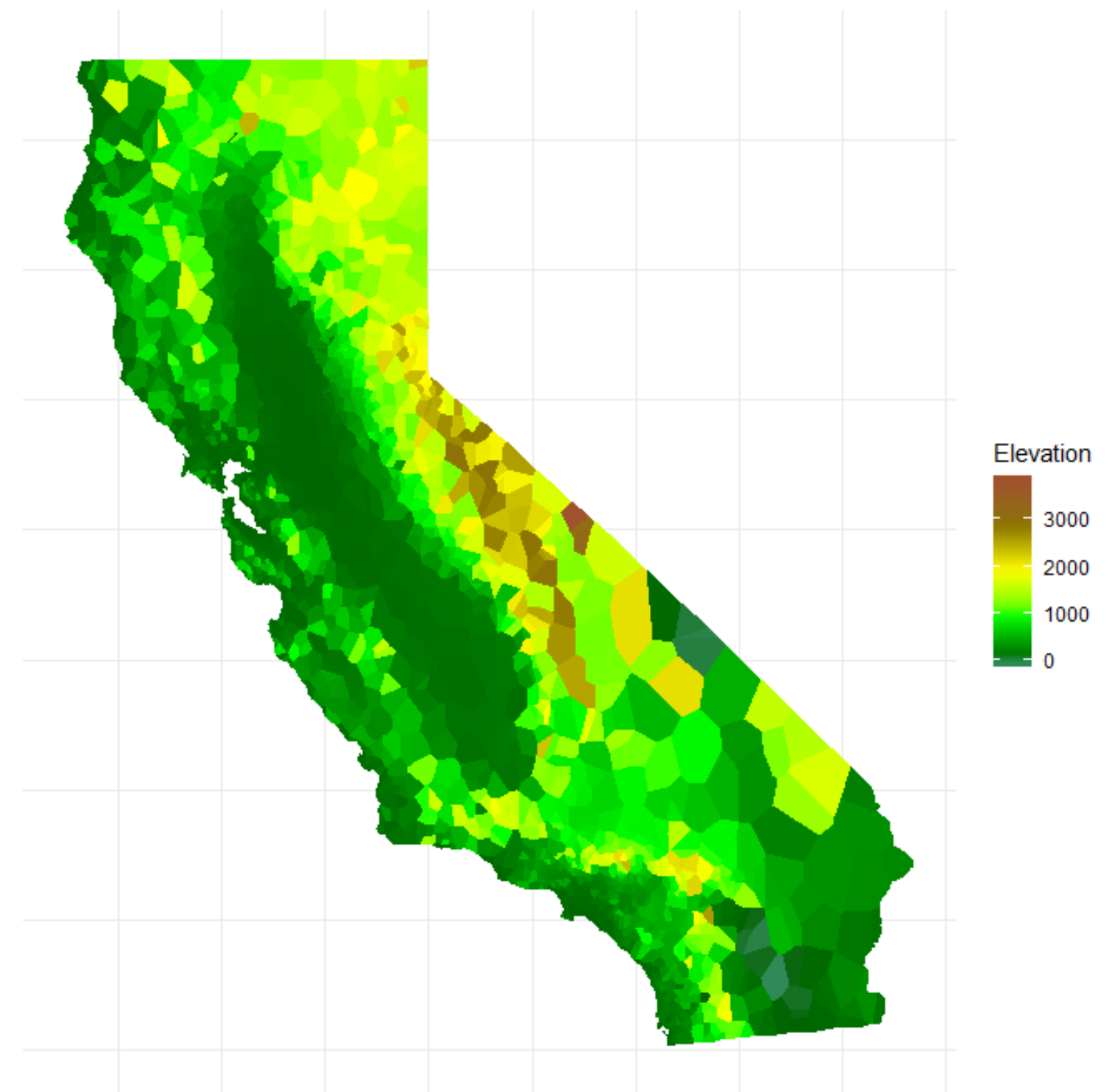
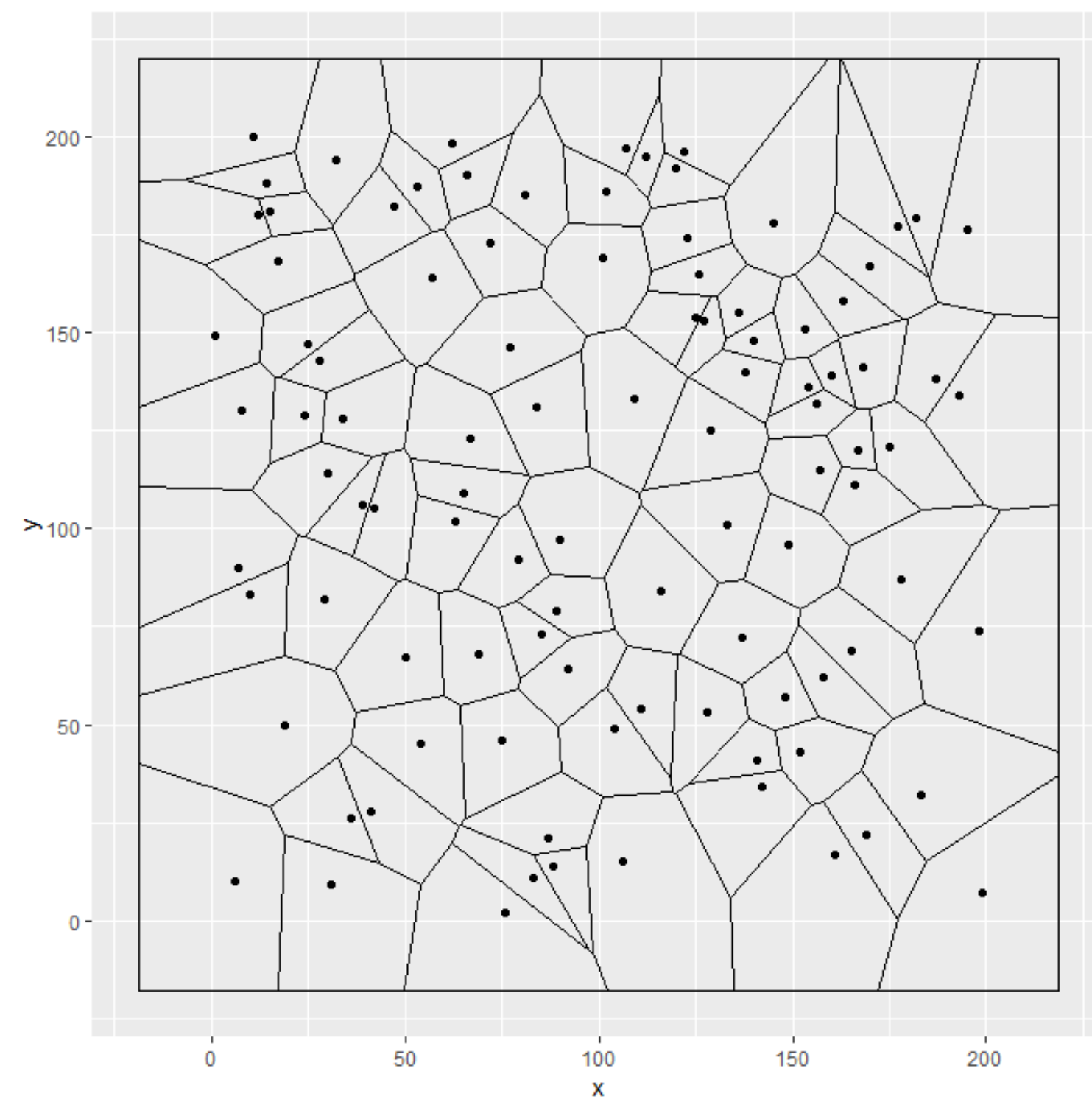


(h)

# Connection Map chart

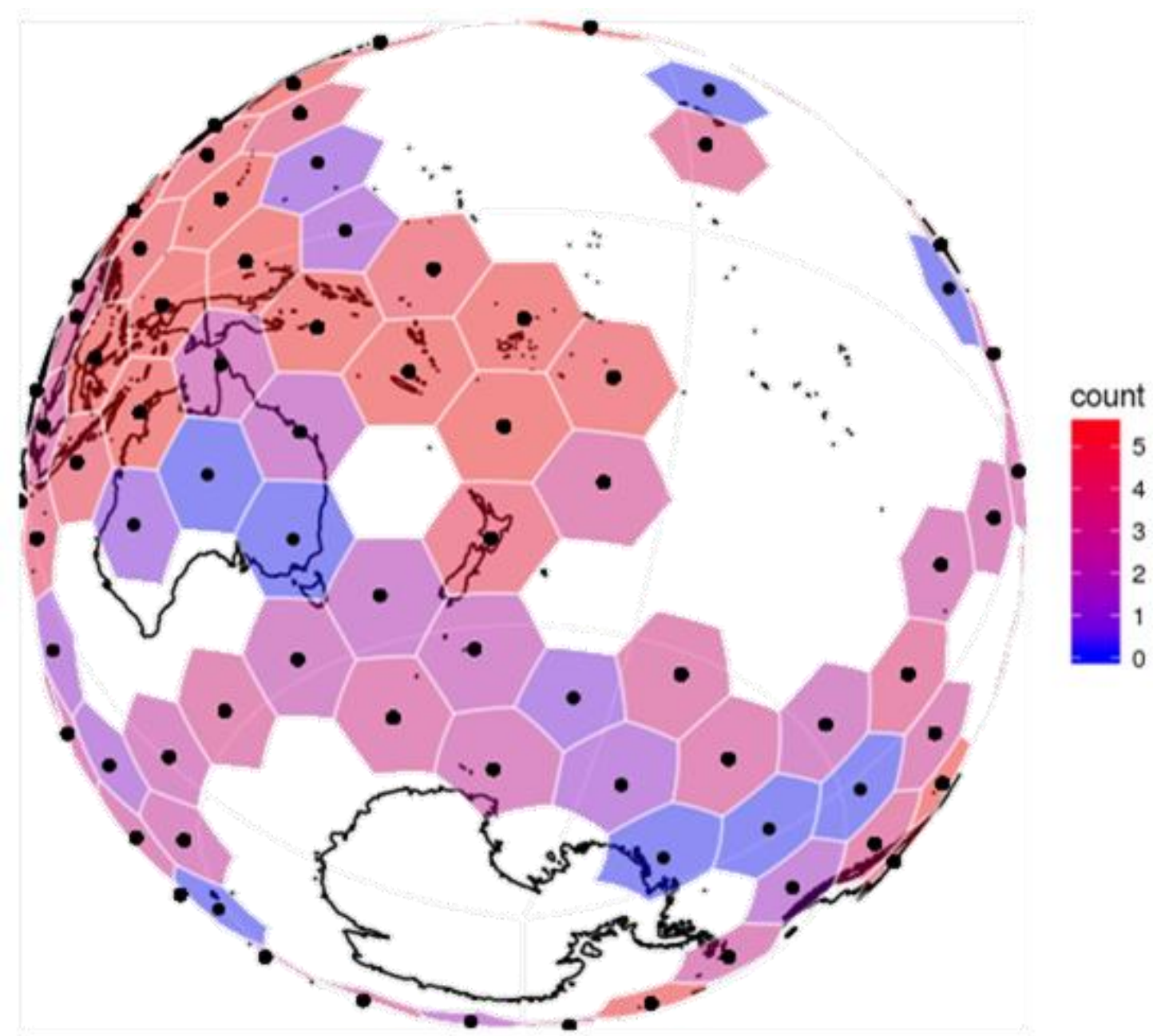


# Voronoi Chart

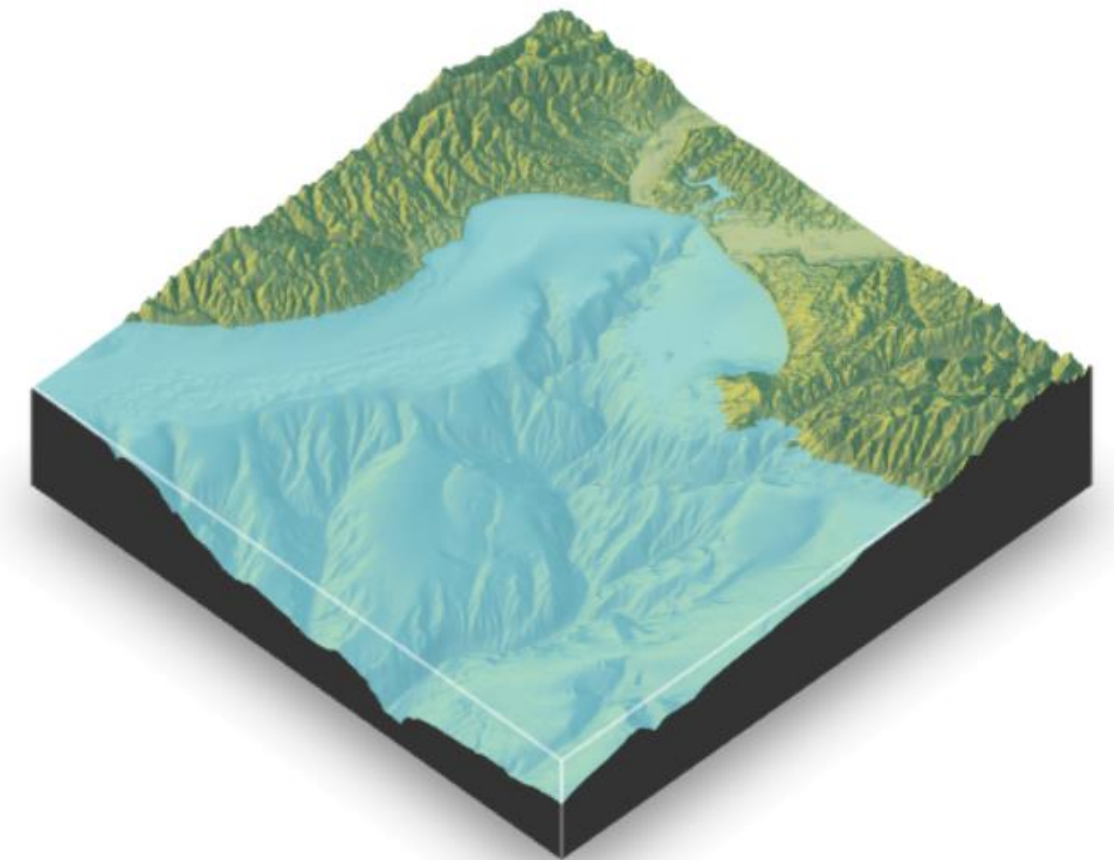
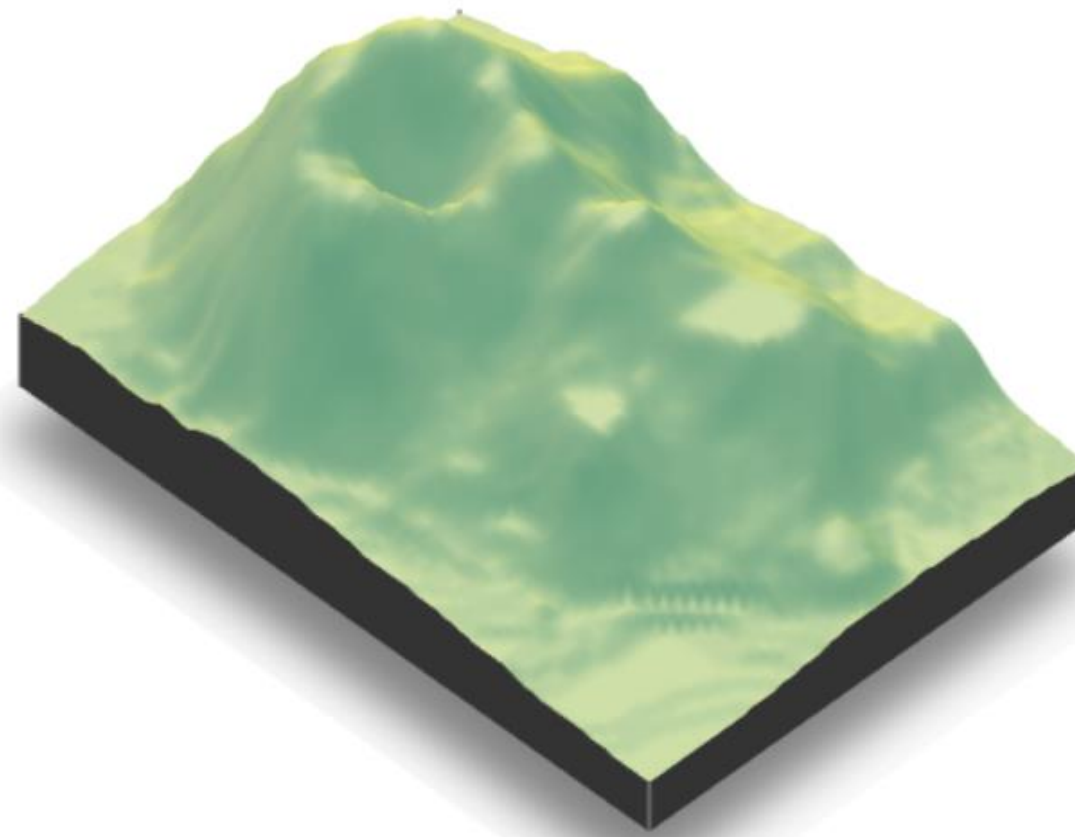
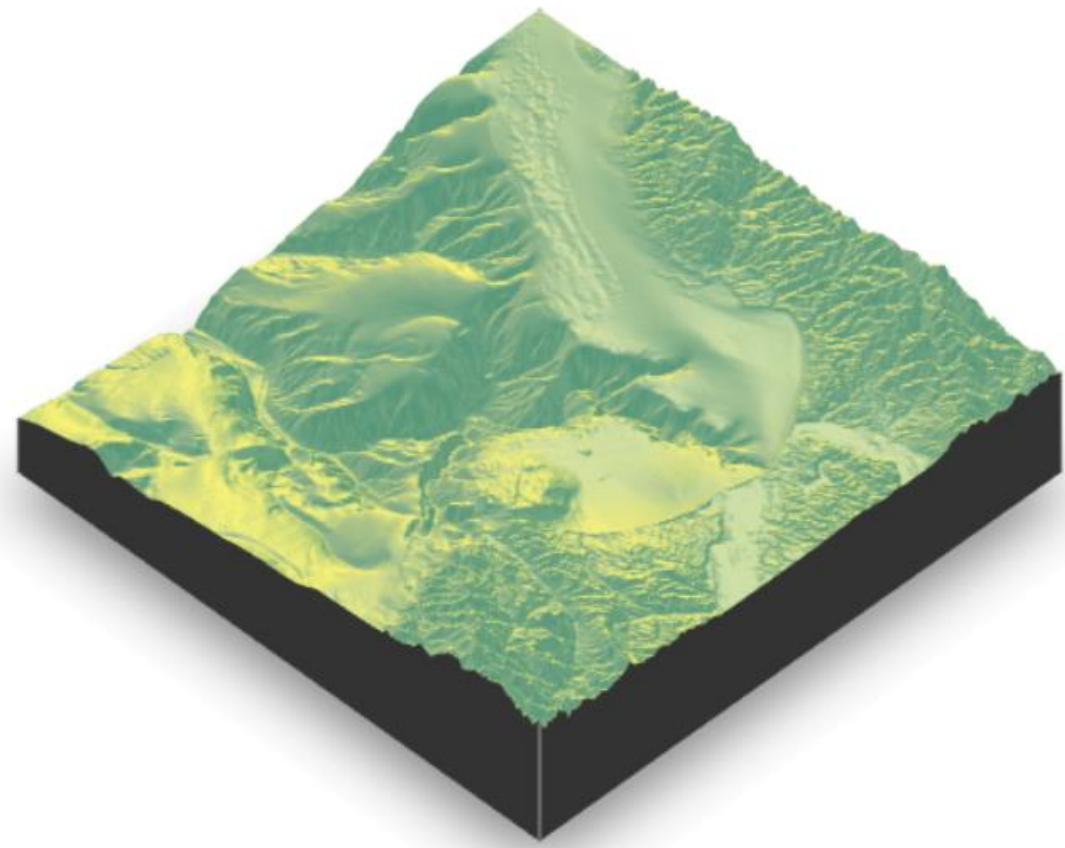




# Tessellation Map Chart

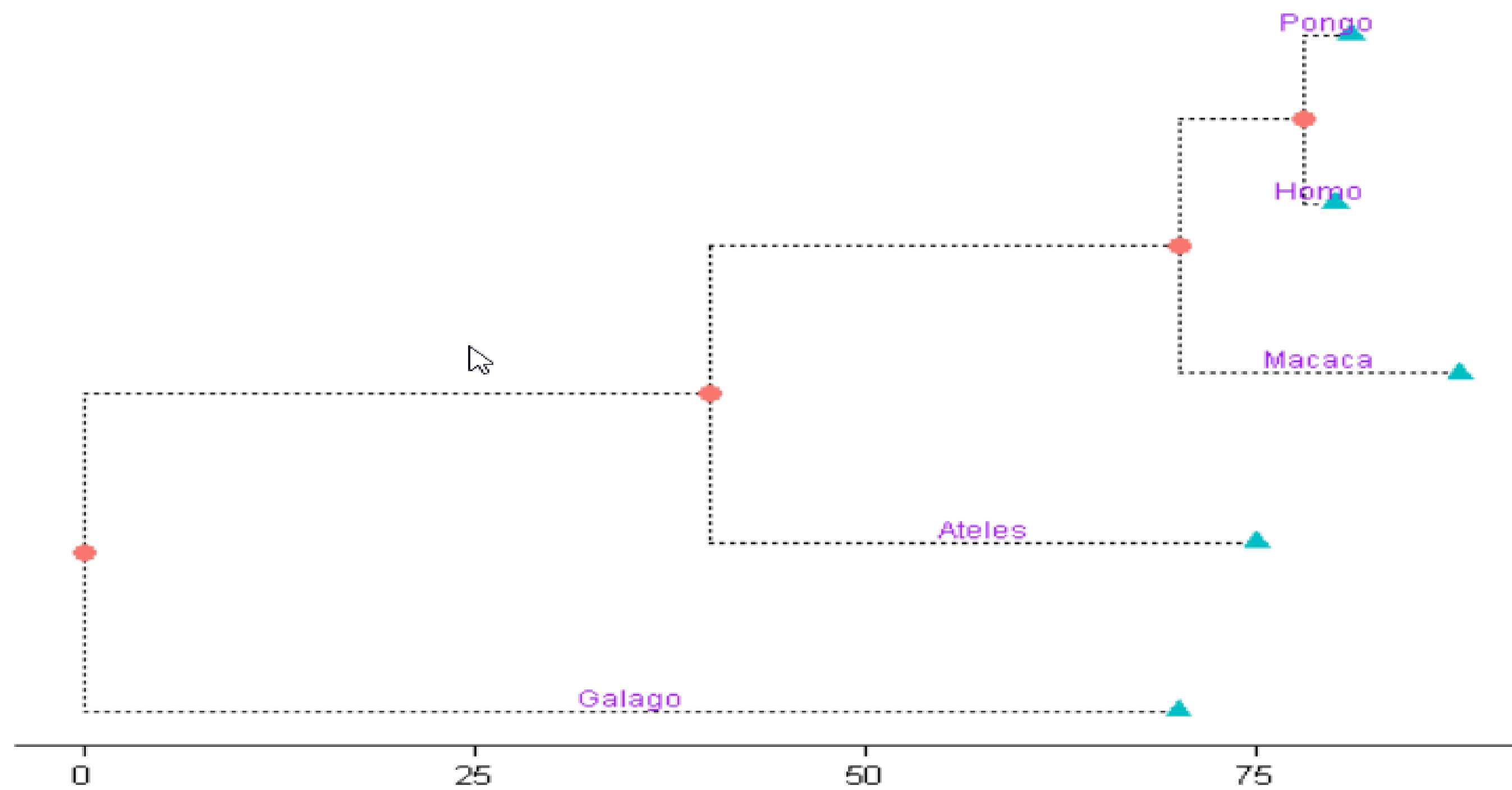


# Hillshaded maps

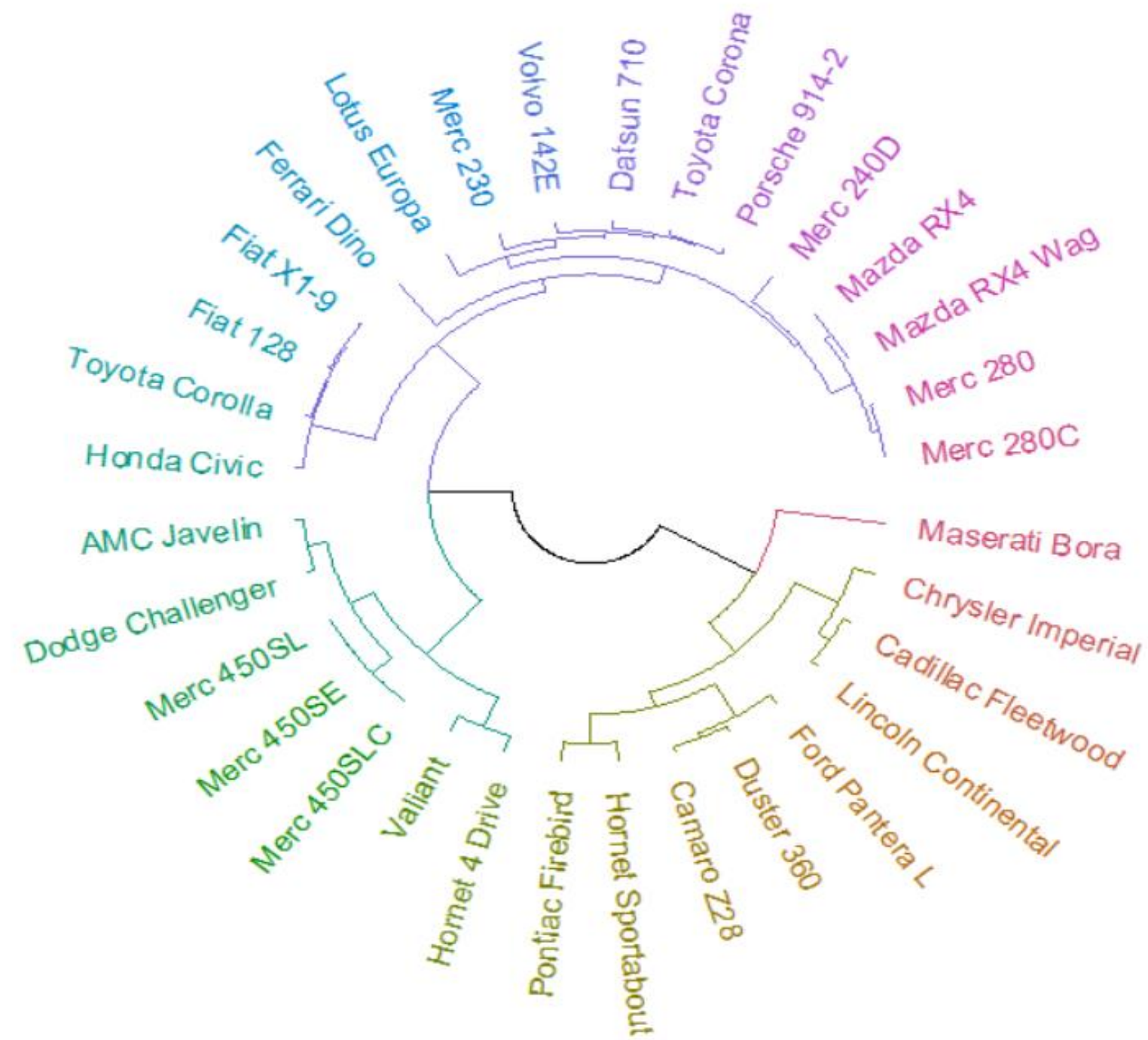


Biology/Chemistry

# Linear Phylogenetic Tree chart

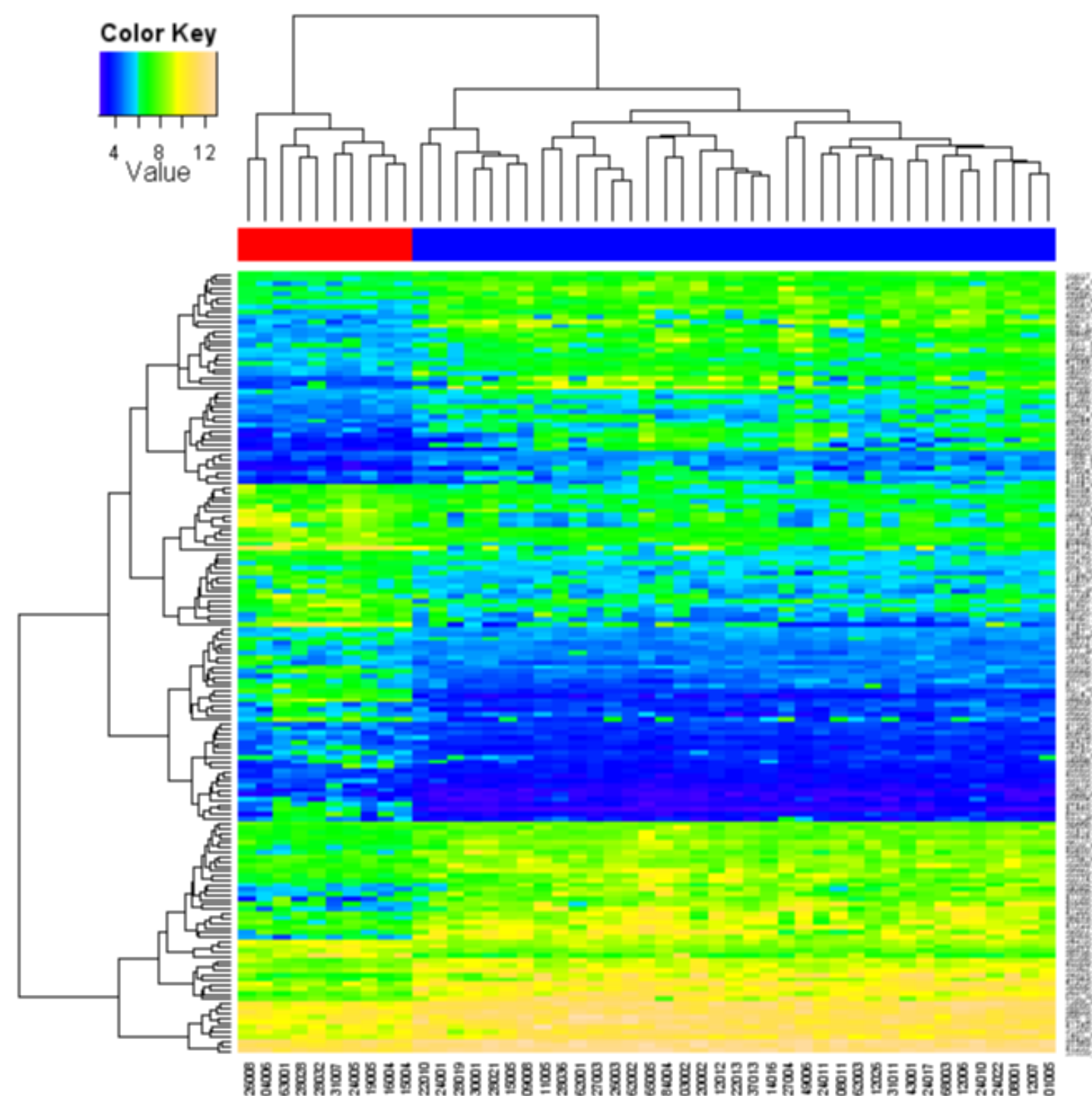


# Polar Phylogenetic Tree chart

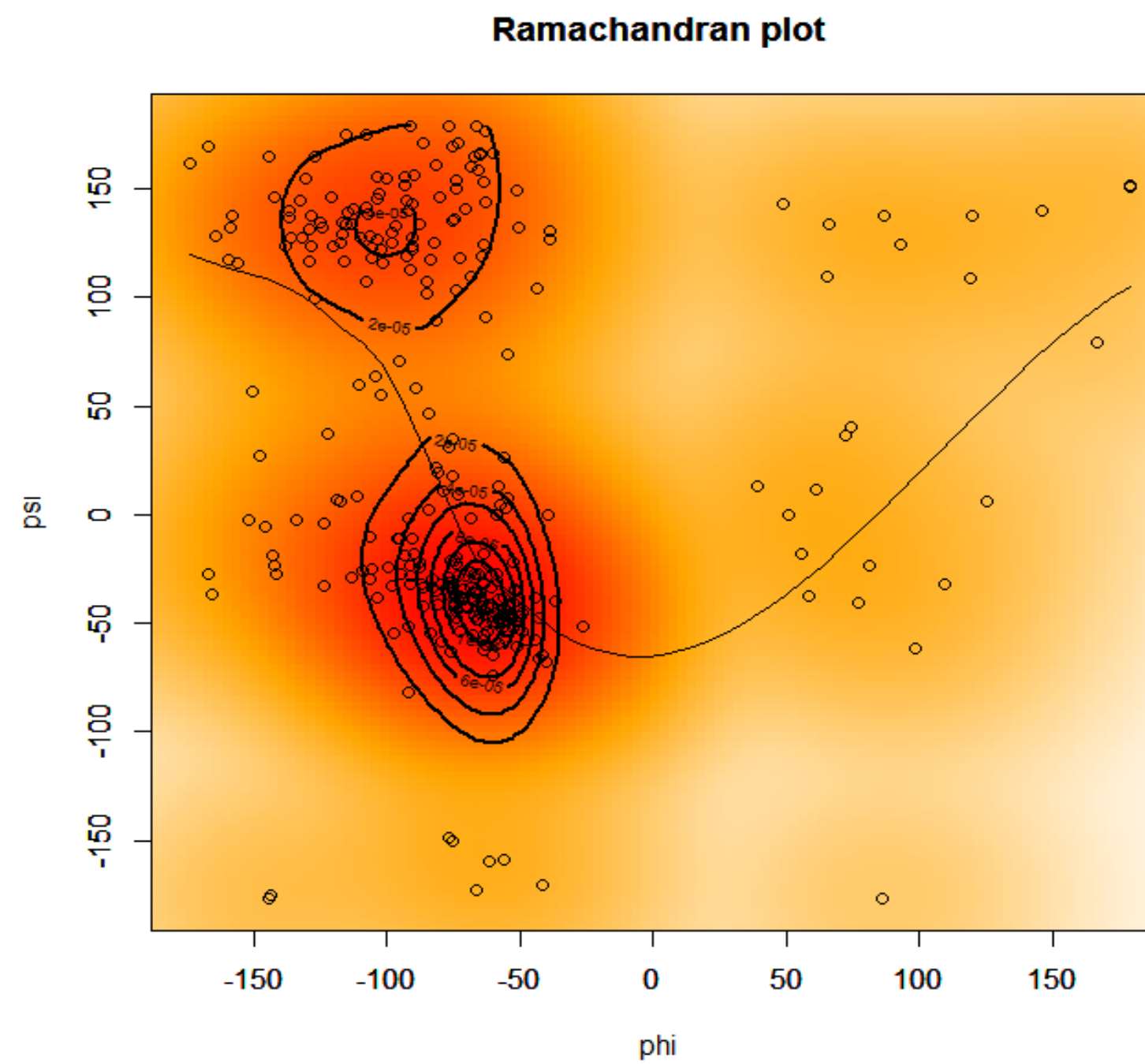




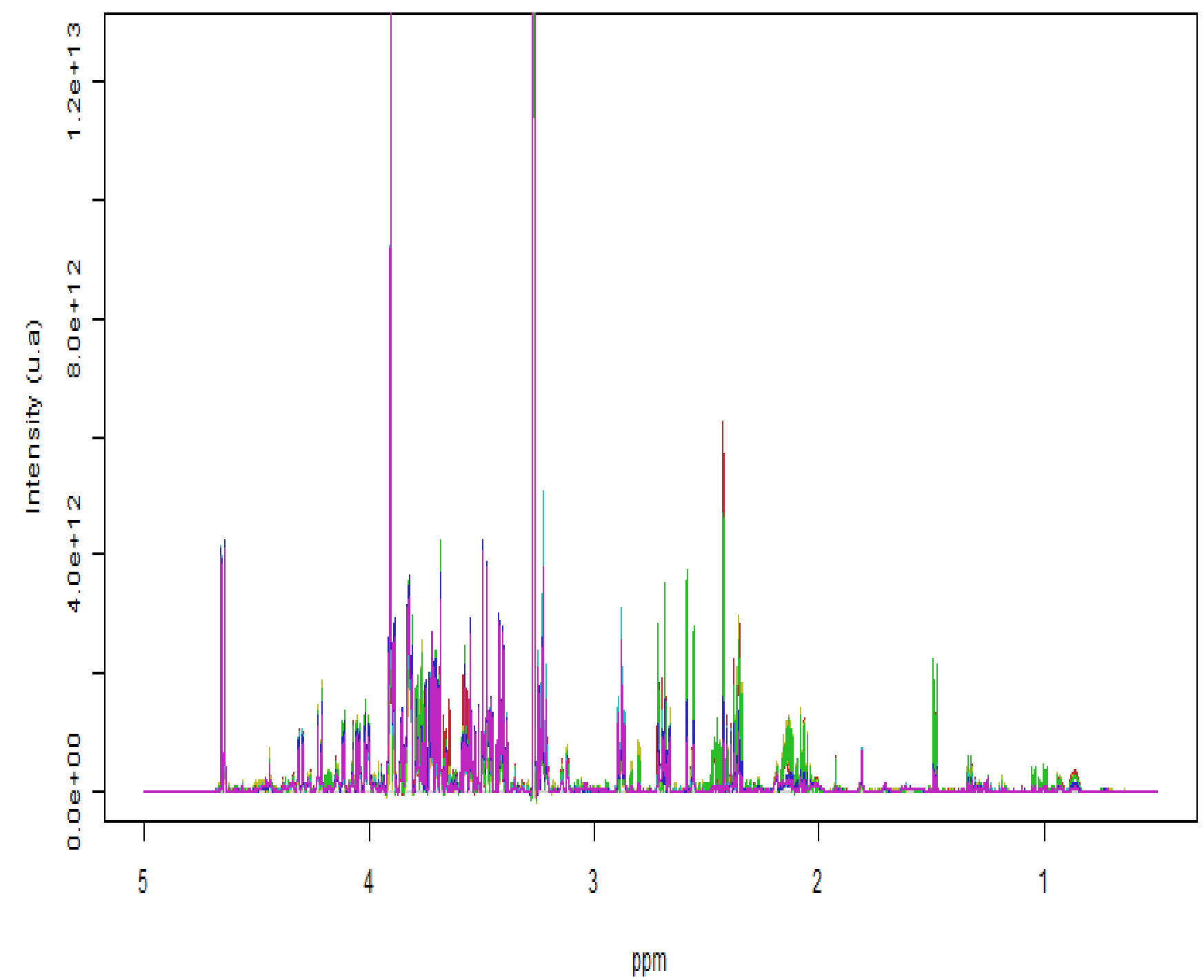
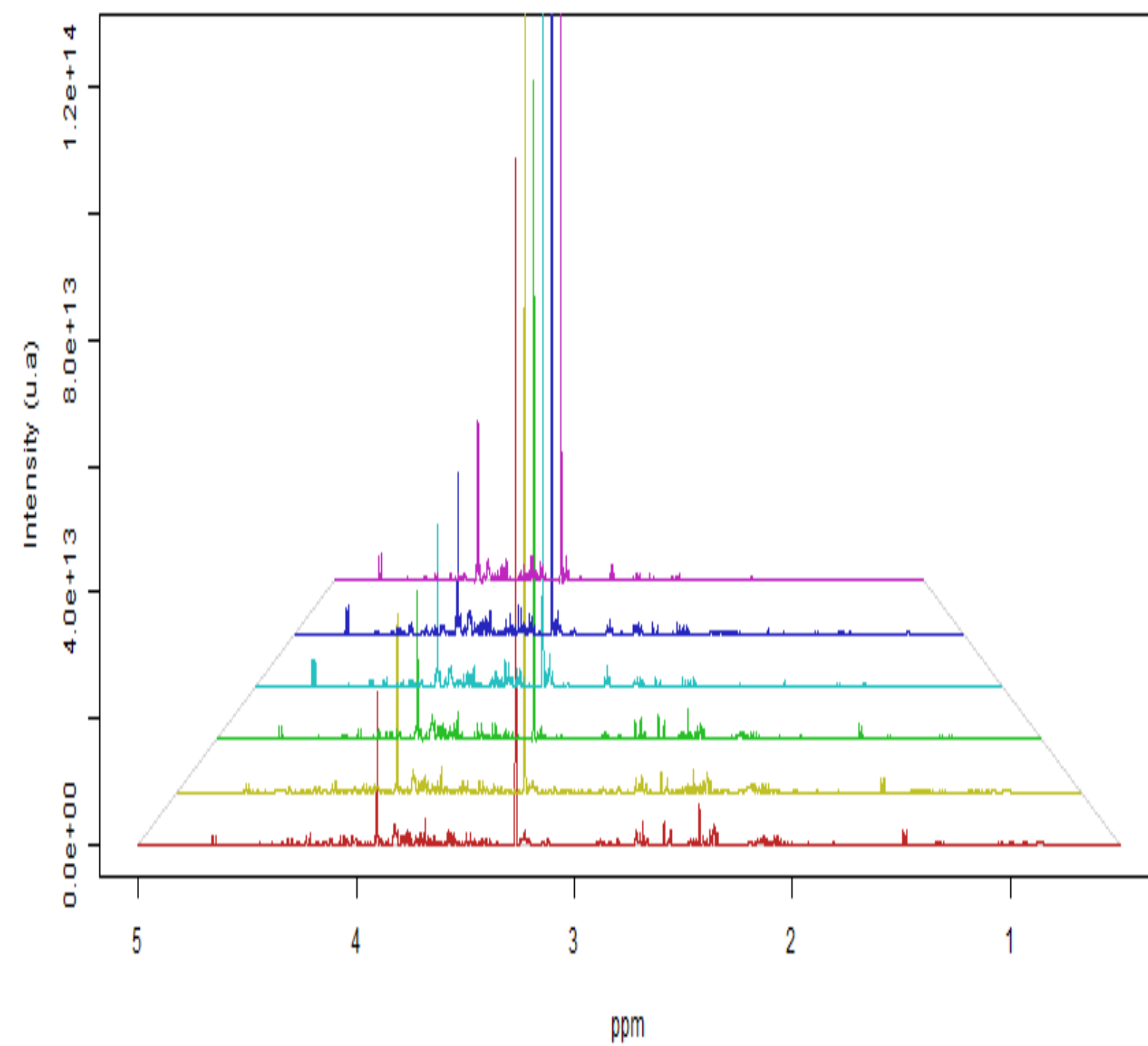
# Microarray Clustering chart



# Ramachandran chart

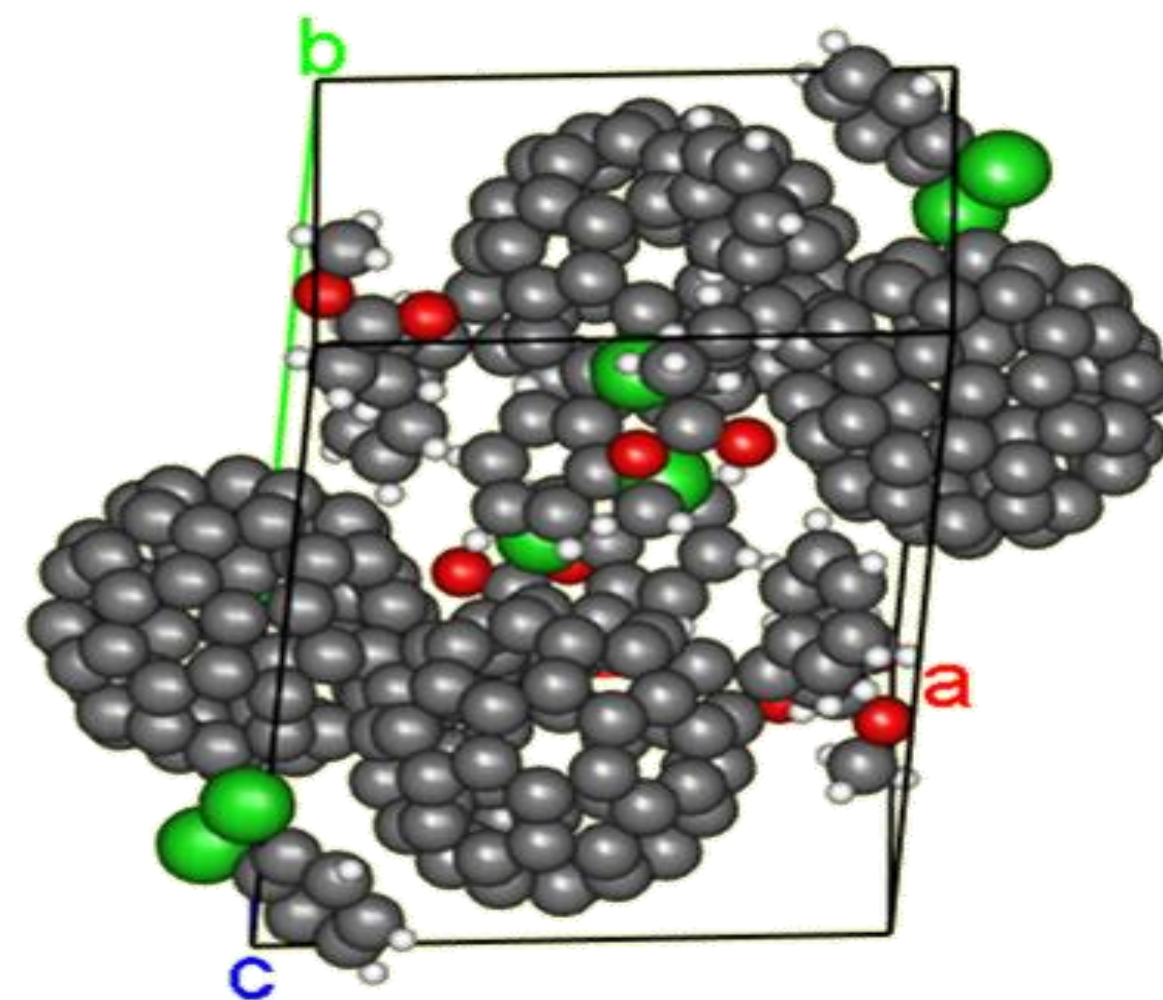
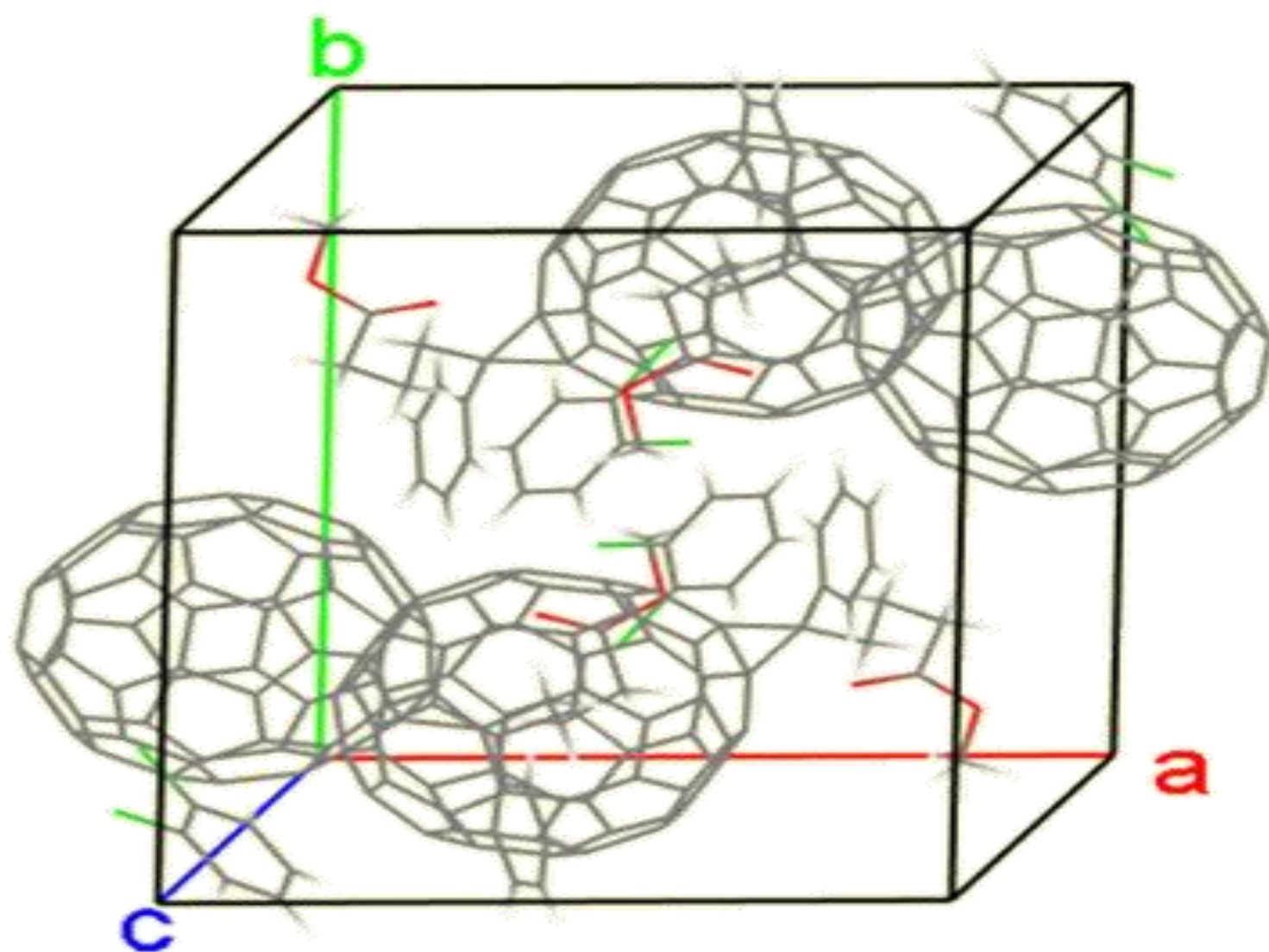


# Nuclear Magnetic Resonance (NMR)



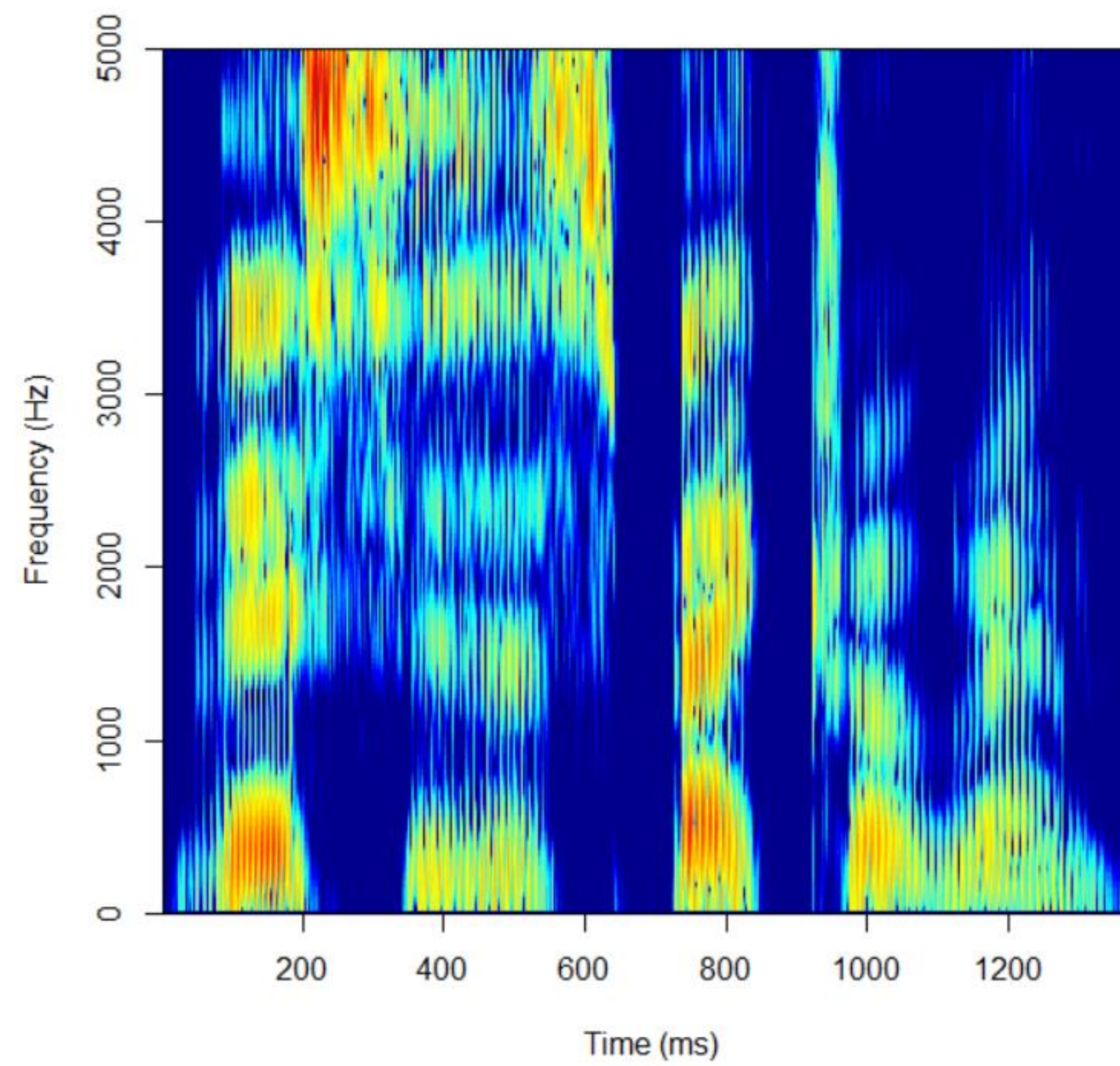


# Molecular structures chart



Sound/Audio

# Spectrogram



# Conclusion